PUBLIC HEALTH LABORATORY
DATA BASE MANAGEMENT SYSTEM

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Abbreviations Found in the Test

ADP	AUTOMATIC DATA PROCESSING
AFB	ACID FAST BACILLUS
ASO	ANTISTREPTOLYSIN O
ASTPHLD	ASSOCIATION OF STATE AND TERRITORIAL PUBLIC HEALTH LABORATORY DIRECTORS
BASO	BASOPHIL
BFT	BENTONITE FLOCCULATION TEST
BPI	BITS PER INCH
CBC	COMPLETE BLOOD COUNT
CDC	CENTERS FOR DISEASE CONTROL
CF	COMPLEMENT FIXATION
CMV	CYTOMEGALOVIRUS
CRP	C-REACTIVE PROTEIN
CSF	CEREBRAL SPINAL FLUID
DBMS	DATA BASE MANAGEMENT SYSTEM
DFATP	DIRECT FLUORESCENT ANTIBODY TREPONEMA PALLIDUM
DOB	DATE OF BIRTH
EBV	EPSTEIN-BARR VIRUS
EEE	EASTERN EQUINE ENCEPHALITIS
EIA	ENZYME IMMUNOASSAY
EOS	EOSINOPHIL
FA	FLUORESCENT ANTIBODY
FADF	FLUORESCENT ANTIBODY DARKFIELD
FTA-ABS	FLUORESCENT TREPONEMA ANTIBODY-ABSORPTION
FTEE	FULL TIME EQUIVALENT EMPLOYEE

HCT	HEMATOCRIT
HGB	HEMOGLOBIN
HI	HEMAGGLUTINATION INHIBITION
IFA	INDIRECT FLUORESCENT ANTIBODY
IgM	IMMUNOGLOBULIN M
IHA	INDIRECT HEMAGGLUTINATION
LA	LATEX AGGLUTINATION
LPM	LINES PER MINUTE
MCH	MEAN CORPUSCULAR HEMOGLOBIN
MCHC	MEAN CORPUSCULAR HEMOGLOBIN CONCENTRATION
MCV	MEAN CORPUSCULAR VOLUME
MHA-TP	MICROHEMAGGUTINATION-TREPONEMA PALLIDUM
PPNG	PENICILLINASE-PRODUCING NEISSERIA GONORRHOEAE
RBC	RED BLOOD CELL COUNT
RPR	RAPID PLASMA REAGIN
RSV	RESPIRATORY SYNCYTIAL VIRUS
SEGS	SEGMENTED NEUTROPHIL
SLE	ST LOUIS ENCEPHALITIS
SNT	SERUM NEUTRALIZATION TEST
STD	SEXUALLY TRANSMITTED DISEASE
VDRL	VENEREAL DISEASE RESEARCH LABORATORY
WBC	WHITE BLOOD CELL COUNT
WEE	WESTERN EQUINE ENCEPHALITIS
WIP	WORK-IN-PROGRESS
WTU	WORK TIME UNITS
YTD	YEAR-TO-DATE

PUBLIC HEALTH LABORATORY DATA BASE MANAGEMENT SYSTEM

Introduction

In 1979, an ad hoc committee, composed of members from the Association of State and Territorial Public Health Laboratory Directors (ASTPHLD) and the Centers for Disease Control (CDC), was formed to develop a data base management system (DBMS). The committee was charged with the mission of developing a DBMS that would provide public health laboratory directors with the potential to control the overwhelming workload of paper handling and to reduce the unnecessary clerical burden. The committee members are listed on table A-1.

Definition of the Problem

In the first phase of this project, a study was conducted to authenticate the seriousness of the paper-handling problem in public health laboratories as it pertained to clerical, laboratory support, and professional/technical personnel. Statistics from these findings showed that, for the period 1971-79, the number of specimens received by public health laboratories increased 34.8%, professional/technical personnel increased 14.1%, but clerical personnel decreased 0.4%. Implications of this data are that professional/technical personnel are forced to "shuffle" paper. Details of the study were reported in 1981.[1]

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[1]Adcock, DE, Lawton HL. The paperwork crunch in state public health laboratories. Am J Public Health 1981; 71:748-50.

Table A-1. Data Base Management System Committee

Name	Committee Position	Organization Represented	Organization Position
R. Lundgren	Chairman	Division of Laboratories Department of Public Health Providence, Rhode Island	Assistant Director of Health
M. Kerbaugh	Member	Public Health Laboratory State Board of Health Raleigh, North Carolina	Director
J. Brough	Member	State Hygienic Laboratory Department of Public Health South Charleston, West Virginia	Director
A. Bond	Member	Scientific Laboratory Division Health and Environmental Department Albuquerque, New Mexico	Director
A. Dean	Member	State Department of Health Minneapolis, Minnesota	State Epidemiologist
J. Mason	Member	Division of Health Salt Lake City, Utah	State Director of Health
D. Adcock	Member	Laboratory Management Consultation Office Laboratory Improvement Program Office Centers for Disease Control Atlanta, Georgia	Management Analyst
H. Lawton	Member	Laboratory Management Consultation Office Laboratory Improvement Program Office Centers for Disease Control Atlanta, Georgia	Data Processing Consultant

Having satisfied themselves that a paper-handling problem did exist, the members of the committee turned their attention to the development of a DBMS. They analyzed the overall flow of work and applied the results to an automatic data processing (ADP) environment. An abbreviated schematic of the work flow is shown in figure A-1. The committee then requested from many of the ASTPHLD members a complete set of specimen submission forms, a set of management and workload reports, and suggestions for management reports. After studying these three sets of input and output data, some members of the committee visited laboratories to obtain additional data and discuss laboratory needs in relation to a DBMS. As a result of this analysis, the magnitude of the problem, and limited resources, the committee was compelled to limit the DBMS to the field of microbiology.

System Design

The DBMS is designed primarily to be operated with a dedicated stand-alone minicomputer. The hardware configuration suggested for maintaining 1 year's data at a volume of 500,000 specimens is listed in table A-2. Two points should be noted. First, fewer units of computer hardware would not be able to handle the data generated by 500,000 specimens a year. Second, if workload volume were considerably more than 500,000 specimens annually, the suggested hardware configuration would not be sufficient to keep all data stored on line for 1 year. If a situation were to occur, as noted in either of the two points, then data would have to be summarized frequently and

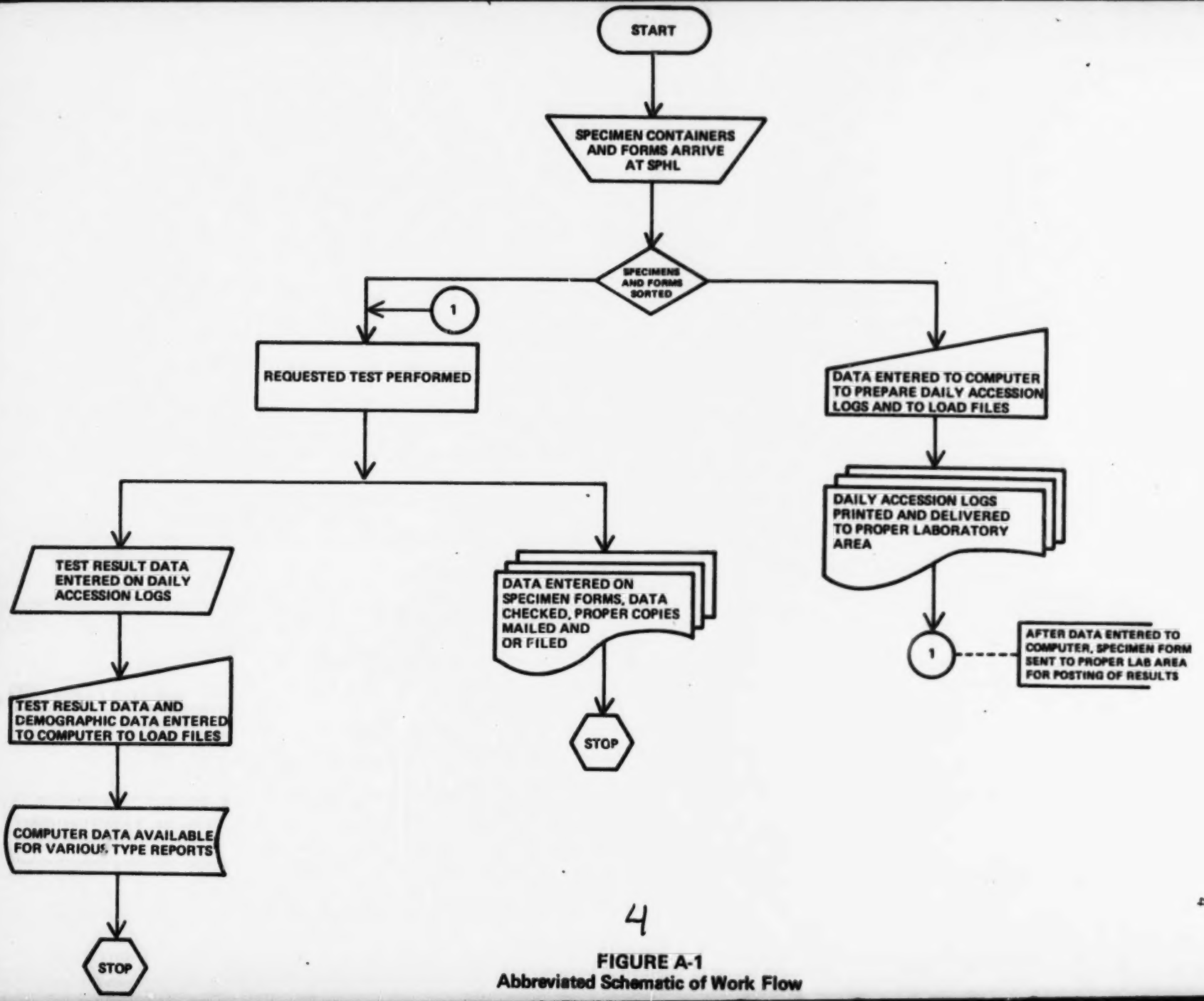
START
SPECIMEN CONTAINERS AND FORMS ARRIVE AT SPHL
SPECIMENS AND FORMS SORTED
1
REQUESTED TEST PERFORMED
DATA ENTERED TO COMPUTER TO PREPARE DAILY ACCESSION LOGS AND TO LOAD FILES
DAILY ACCESSION LOGS PRINTED AND DELIVERED TO PROPER LABORATORY AREA
1
AFTER DATA ENTERED TO COMPUTER, SPECIMEN FORM SENT TO PROPER LAB AREA FOR POSTING OF RESULTS
TEST RESULT DATA ENTERED ON DAILY ACCESSION LOGS
DATA ENTERED ON SPECIMEN FORMS, DATA CHECKED, PROPER COPIES MAILED AND OR FILED
STOP
TEST RESULT DATA AND DEMOGRAPHIC DATA ENTERED TO COMPUTER TO LOAD FILES
COMPUTER DATA AVAILABLE FOR VARIOUS TYPE REPORTS
STOP

FIGURE A-1
Abbreviated Schematic of Work Flow

Table A-2. Suggested Hardware Configuration

Item	Number	Size
Central Processing Unit	1	512K core
Disk Unit	Appropriate Number	300 megabytes each
Magnetic Tape Unit	1	2,400 ft, 1,600 BPI*
Printer	1	600 LPM**
Printer	1	100 LPM** (backup)
Work Station Video Display	Appropriate Number	1 at the console 3 in specimen arrival area, 1 in each laboratory area

*BPI = bits per inch
**LPM = lines per minute

stored off-line. A state mainframe computer could be used as an alternative to a minicomputer or in conjunction with a minicomputer to provide massive storage capacity.

A number of reasons exist for suggesting a dedicated, stand-alone minicomputer for the laboratory. Two main reasons are that (1) laboratory work would have top priority, and (2) data transcription would occur in the laboratory. The second reason would save considerable clerical effort because no audit trail for logging data forms in and out of the laboratory would be necessary.

Although the basic philosophy of the DBMS is to provide data which can be used in producing reports but not to actually produce reports, the committee carefully studied the types of output data which would give meaningful workload and management reports. The 26 files shown in the Data Files section of this report were defined and formatted to allow each state to tailor workload and management reports for that particular state's needs.

Once the output was defined it was possible to determine the necessary input data. This was accomplished in several steps. First, all input data elements were listed and sorted by each laboratory area. Then, each committee member was asked to edit the listings. Finally, it was determined that the basic set of input data had been identified by each laboratory area.

Input/Output

Basic input data was divided into two types. The first type is called PRETEST, which is data that is entered before test results are known. The second type is called POST-TEST, which is primarily data that is entered after the test results are known.

Pretest data has been divided into two types. The first type consists of six lines of data common to all laboratory specimens. The data elements requested on these six lines are accession number, date collected, clinical specimen (yes or no), program number, date received, referred specimen (yes or no), billing number, date of onset, acute or convalescent, patient name, date of birth, male or female, race, street, city, county, state, zip code and submitter identification (e.g., Figure C-2).

The second type of pretest data differs with each laboratory area. Data requested are specimen source, specimen type, examination requested, reason for test, foreign and domestic travel, animal type, and human exposure (yes or no).

Post-test data has been separated into two types. The first type consists of two lines of data common to all laboratory specimens. The data elements requested on these two lines are accession number, code for analyst, date reported, specimen unsatisfactory code, and name of laboratory specimen referred to (e.g., Figure C-3).

The second type of post-test data consists of test results and differs with each laboratory area and each type of test request.

All data elements are further described in the Data Files section of this report.

Specimen data entry was divided into 16 laboratory areas (see table A-3). At least two video display screens were developed for each of the 16 areas, one pretest and one post-test. Two post-test screens, however, were developed for mycobacteria and hematology. All screens are displayed and explained in the Work Station Video Display Screens Formats section of this report.

The data entry work flow is shown schematically in figure A-2. Note that first a menu screen is displayed; the appropriate pretest or post-test screen in requested by using this screen. Data is entered and the transcriber signs off, or the cycle is repeated. Pretest data will normally be entered by nonprofessional or nontechnical personnel. Post-test data should be entered by the analyst who performs the test. Generally speaking, about half of the data is transcribed before the specimen is tested, and about half is transcribed after the specimen is tested.

Table A-3. Laboratory Areas Covered in the Data Base Management System

LABORATORY AREA	ABBREVIATION
THROAT AND NASAL PHARYNGEAL	NA
SEROGROUPING AND SEROTYPING	SE
MYCOBACTERIOLOGY	TE
ENTERICS	EN
GONOCOCCUS	GC
MISCELLANEOUS BACTERIOLOGY	MB
MYCOLOGY	MY
PARASITOLOGY	PA
VIROLOGY	VI
RABIES	RA
SYPHILIS SEROLOGY	TP
BACTERIAL FEBRILE SEROLOGY	BF
FUNGAL SEROLOGY	FU
PARASITOLOGICAL SEROLOGY	PL
VIRAL AND RICKETTSIAL SEROLOGY	VR
HEMATOLOGY	HE

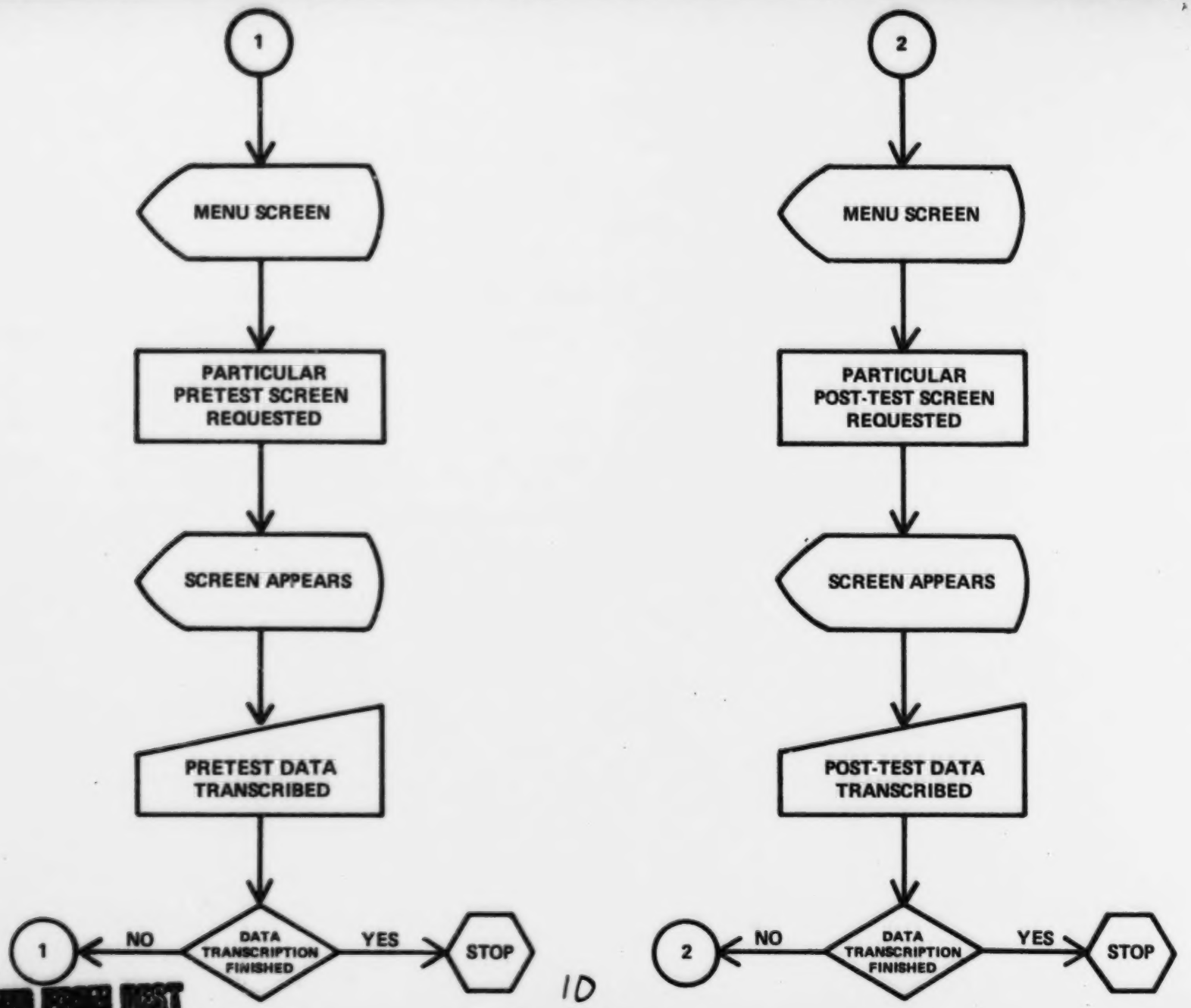

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FIGURE A-2
Abbreviated Schematic of Pretest and Post-Test Data Entry Work Flow

Miscellaneous Items

The Centers for Disease Control - Association of State and Territorial Public Health Laboratory Directors Data Base Management System (DBMS) is structured to give each state the capability of tailoring the system to its individual needs. Not all states will need all 26 files. Not all states will want or need to input all data. Not all states will have the same output needs in terms of workload data or management reports. Among other things, this implies that the actual computing and storage needs of each state will vary.

Work completed on the DBMS, the results of which are available to all association members, should save a state up to 1 year of analysis effort. Data input can be accomplished without redesigning present specimen forms. Obviously, specimen forms specifically designed to mesh with the visual display format screens will facilitate data entry. The files are formatted so that report writing would be merely a matter of structuring the data layout. A sample of a suggested report is shown in the Work Station Visual Display Screens Format section of this report.

Success with reports that require selecting, choosing, and combining any of the hundreds of elements in the data base will depend on the operating system environment. In some cases, the hardware selected will require the use of a specific operating system. In other cases, some hardware configurations allow a limited flexibility in choices of operating systems. Some operating

systems are vendor portable and can be adapted for use on several minicomputers. Hardware and software should be purchased from the same vendor to aid in determining party responsible in the event of hardware or software malfunction.

System Backup

Every computer system should have backup equipment. The configuration in table A-2 includes backup hardware to handle the work stations, main type of input, and backup equipment for printing, the main type of hard copy output. This backup includes enough visual display terminals to handle the workload if one or two are out of service for a short period. Further, the 100 lines per minute (LPM) printer could be used as a temporary backup for the 600 LPM printer.

If it were feasible to depend on the state mainframe, only the 100 LPM printer might be needed along with the minicomputer. All large volume printing could be done on the state mainframe printer. In addition, the state mainframe could be used temporarily as the primary backup if the minicomputer malfunctioned, but the minicomputer software and word structure would have to be compatible with the state mainframe.

Another possibility for backup is to retain the capability of a good manual system. Before automatic data processing (ADP) techniques are applied, the present manual system should be thoroughly studied; a work flow and forms

design study would be the starting point. All unnecessary filing, unnecessary copies of forms and reports and unnecessary movement of forms from the laboratory to the clerical office and back should be eliminated. All specimen forms should be of uniform size, if possible, with test request data and test result data on the same form. Test results should be indicated by a check in the proper space or by a stamped phrase. The forms may be folded and placed in window envelopes for mailing to avoid additional typing. These and similar actions will streamline a manual system.

One word of caution about using a manual system for backup purposes: It should be used for only a very short period, since it is not good practice to mix the manual system with an ADP system. An ADP system has file structures, data storage, and a retrieval philosophy so different from a manual system that it is not logical to mix the two systems. Mixing could result in inaccurate data update, duplication of data, and loss of data, among other things.

DATA FILES

Introduction

This section contains 26 suggested files for the Data Base Management System (DBMS). Data for these files would be entered during one of four data transcriptions. First, data would be entered when the files were originally built. Second, pretest specimen data would be entered to create the daily log/worksheet queue. Third, management or specimen support data would be entered during slack times and would include building the laboratory reference file, the epidemiology file, and the referred specimen file. And, fourth, specimen result data would be entered during post-test data transcription.

Data entered for the log/worksheet queue would be automatically loaded to other files, where applicable. This sharing of data is indicated in table B-1. The approximate number of characters in each file and the suggested retention time for each file are indicated in table B-2. A grand total of characters actively stored is about 153,000,000.

Although only four files (program, county, state, and country names) are given permanent retention status, some of the other files should have very few changes annually. If a state wanted to store data representing several years (for example, for use in trend analysis), such data storage would have to be designed by the state analysts and programmers, and the number of characters stored would then exceed the 153,000,000 estimate mentioned previously.

TABLE B-1. Files in Which Data Elements Are Stored on First Data Entry

Item Name From Log/Worksheet Queue	Files Which Receive Data Elements from Log/Worksheet										
	Program Served	County Served	Submitter ID	Animal Type	Specimen Count	VD	Specimen	Patient History	Specimen Source	Specimen Type	Race
Lab Subarea	X	X	X		X	X					
Accession Number							X				
Date Received							X				
Program Number	X	X									
Acute/Convalescent											
Patient Name							X	X			
Patient DOB							X	X			
Patient Sex								X			
Submitter			X								
Submitter County Code	X	X	X								
Test Requested Code	X	X	X								
Specimen Type Code										X	
Specimen Source Code									X		
Animal Type Code				X							
Human Exposure				X							
Patient Race								X			X
Clinical/Referred					X						

TABLE B-2

File Information

File Name	Suggested Retention Time of File	Daily/Annual No. of Characters in File (Approximate)
Log/Worksheet Queue	Daily	176,000
Program Served	Annual	3,346,000
County Served	Annual	3,363,000
Submitter ID	Annual	4,732,000
Animal Type	Annual	46,000
Specimen Count	Annual	1,100
Sexually Transmitted Diseases	Annual	1,600
Specimen	Annual	55,500,000
Patient History	Annual	84,500,000
Specimen and Culture Source	Annual	1,240
Specimen Type	Annual	700
Work Time Units/ Laboratory Area	Annual	1,900
Test Requested	Annual	2,300
Race	Annual	300
County Name	Permanent	2,900
Work Time Units	Annual	5,300
Laboratorian ID	Annual	15,500
Program Name	Permanent	1,200
Unsatisfactory Specimen	Annual	300
Laboratory Reference	Annual	12,300
Epidemiology	As Long as Needed	485,000
Referred Specimen	Annual	385,000
State	Permanent	1,100
Test Result	Annual	70,700
Country	Permanent	30,600
Work Time Unit Procedures	Annual	51,000
	Approximate Total	153,000,000

Basic assumptions must be made as to the number of key parameters for which the DBMS is designed. These key parameters and their numbers are shown in table B-3. These numbers represent "worst case" totals, so many states actually would need less active storage capacity.

The files and file codes are shown in tables B-4 through B-29. The letters "A" and "N" in the alphanumeric code column stand for "alphabetic characters" and "numeric characters," respectively.

The files identified and discussed in this section are those considered primary to the development of this DBMS. The list of files should be considered unique, each having a singular place in the development of the data base. Some files will be developed at the time of software installation; e.g., physicians, programs served. Some will be fixed; e.g., county, work time units, unsatisfactory specimens. The remaining will be dynamic in nature and will constitute the routine data files for the system; e.g., specimen, specimen source, specimen type.

It should be understood that the actual software developed for the data base may require that these files be structured in such a manner as to optimize both the advantages of the language and the hardware used. That is to say, these files are not presented as basic, fundamental requirements for the data base but that the data they accumulate is basic to the development of the data base system as defined by the CDC-ASTPHLD computer committee. Software development, whether by an individual state or by contract vendor, should be written so as to permit the easy identification and retrieval of data contained in each of the files.

TABLE B-3

Key Parameters: Names and Numbers

Name	Number	
Annual Specimens	500,000	
Average Daily Specimens	2,000	(Assuming a 250-day work year)
Programs	100	
Counties	160	
Laboratory Areas	6	
Laboratory Subareas	16	
Submitters	20,000	
Animal Types	14	
Specimen and Culture Sources	40	
Specimen Types	16	
Tests Offered	76	
Race Designations	7	
Laboratorians	500	
Types of Reference Laboratories	25	
Annual Number of Epidemiological Specimens	5,000	
Annual Number of Referred Specimens	5,000	

NOTE: Any significant change in the magnitude of these parameters will affect developmental and operating costs acccordingly.

FILE DESCRIPTIONS

LOG/WORKSHEET QUEUE FILE (Table B-4)

This is the first data entry. It is a temporary file that is purged daily of all work completed. Data from this file will be used to prepare log/worksheet lists used by each laboratory area and subarea as they process each day's specimen workload. At the end of the day, all specimen work not completed will be put into a "work-in-progress" (WIP) file. The WIP file elements will be the first elements printed for each respective laboratory area or subarea on the next day's Log/Worksheet Queue. Each item in the Log/Worksheet Queue File is numbered. For example, item 5 (Acute/Convalescent) will be entered only for immunology specimen requests and will not be transferred to any other file. Item 16 (Patient Race) is not for a log/worksheet list, but it will be transferred to the Race File. Item 17 (Clinical or Referred Specimen) is not for a log/worksheet list, but it will be transferred to the Specimen Count File.

PROGRAM SERVED FILE (Table B-5)

Items 1 (Program Code), 3 (County Code of Submitter), and 4 (Laboratory Subarea) are entered to this file when those three items are transcribed with the first batch of data. Items 1 (Program Code) and 2 (Program Name) are loaded when this file is first built. Items 5 through 8, which are summations, are developed each time items 1, 3, 4 and 9 are entered to the file after the test is completed.

This file feeds no data to any other file.

COUNTY SERVED FILE (Table B-6)

Items 1 (County Code of Submitter), 3 (Program Code), and 4 (Laboratory Subarea) are entered to this file when those three items are transcribed with the first batch of data. Item 2 (Submitter County Name) is loaded when this file is first built. Items 5 through 8, which are summations, are developed each time items 1 and 3 are entered along with item 9 into the file after the test is completed.

This file feeds no data to any other file.

SUBMITTER IDENTIFICATION FILE (Table B-7)

Items 1 (Submitter Identification), 5 (County Code of Submitter) and 8 (Laboratory Subarea) are entered to this file when those three items are transcribed with the first batch of data. Items 2 (Submitter Name), 3 (Submitter Street), 4 (Submitter City), 6 (State Code), and 7 (Zip Code) are loaded when this file is first built. Items 9 through 11, which are summations, are developed each time item 1, and item 12 are entered to the file after the test is complete.

This file feeds no data to any other file.

ANIMAL TYPE FILE (Table B-8)

Items 1 (Animal Type Code) and 2 (Human Exposure) are entered to this file when those two items are transcribed with the first batch of data. Items 1 and 3 (Animal Type Name) are loaded when this file is first built. Items 4, 6, 8, and 10, which

are summations, are developed each time items 1 and 2 are entered to the file. Items 5, 7, 9, and 11, which are summations, are developed each time items 1 and 2 are entered after the test is complete.

This file feeds no data to any other file.

SPECIMEN COUNT FILE (Table B-9)

Item 2 (Laboratory Subarea) is entered to this file when it is transcribed with the first batch of data. Another item (Clinical/Referred), not numbered for this file, is entered to update some of the summations. The remaining items (3 through 20), which are summations, are developed each time item 2 and the Clinical/Referred item are entered to the file.

This file feeds no data to any other file.

SEXUALLY TRANSMITTED DISEASES FILE (Table B-10)

This file will be built when time permits. No data will be entered with the first transcribed batch of data. Only items 1 (Laboratory Subarea) and 2 (Reason for Test Code) need to be entered. Item 4, a set of summations, will be developed as items 1 and 2 are entered to the file. Item 3 (Reason for Test) will be loaded as the file is first built.

This file feeds no data to any other file.

SPECIMEN FILE (Table B-11)

Items 1 (Accession Number), 4 (Patient Name), 5 (Patient Date of Birth), and 7 (Date Specimen Received) are entered to this file when those four items are transcribed with the first batch of data. Item 6 (Date Specimen Collected) is entered during any slack period. Items 2, 3, and 8 through 16 are entered after test results are known. Items 17 and 18 are entered only if conditions are met to enter these items.

This file feeds items 2, 3, 14, and 15 to the Patient History File when and where appropriate.

PATIENT HISTORY FILE (Table B-12)

Items 1 (Patient Name), 7 (Patient's Date of Birth), and 8 (Patient's Sex) are entered to this file when those three items are transcribed with the first batch of data. Items 2 through 6 will be entered during any slack period. Items 9, 10, and 11 through 18 will be transferred from the specimen file when appropriate. Item 19 is a summation which is updated when any one of items 9, 10, 11, or 15 are entered to this file.

This file feeds no data to any other file.

As the DBMS is presented, this file is built automatically as data is entered for the Log/Worksheet Queue File; it could, however, be used as an exception file to retain data only on those patients whose specimen history might have an effect directly on the analysis of later laboratory tests; e.g., mycobacteria, mycology,

and virology results. This decision should be made by each state, depending on their program/client needs. If this file is used as presented, it will require approximately 85,000,000 bytes of storage; however, if it is used as an exception file, the storage needs would be according to state needs.

SPECIMEN AND CULTURE SOURCE FILE (Table B-13)

Items 1 (Specimen Source Code) and 2 (Specimen Source Name) are loaded when the file is built. Item 1 is entered to this file when it is transcribed with the first batch of data. Item 3, a summation, is updated when item 1 is entered to this file.

This file feeds no data to any other file.

SPECIMEN TYPE FILE (Table B-14)

Items 1 (Specimen Type Code) and 2 (Specimen Type Name) are loaded when the file is built. Item 1 is entered to this file when it is transcribed with the first batch of data. Item 3, a summation, is updated when item 1 is entered to this file.

This file feeds no data to any other file.

WORK TIME UNITS/LAB AREA FILE (Table B-15)

Items 1, 2, 4, and 5 are loaded to the file when the file is built. Items 6 through 11, which are summations, are updated as items 2 (Laboratory Subarea) and 3 (Test Code) are entered after the specimen has been tested. Each Laboratory Area

(item 1) will be built by defining those Laboratory Subareas (item 2) contained in each Laboratory Area.

TEST REQUESTED FILE (Table B-16)

Items 1 (Test Code) and 2 (Test Name) are loaded when the file is built. Item 3 (Sum of Tests by Test Type) is updated each time item 1 is entered to the file after the specimen has been tested.

RACE FILE (Table B-17)

Items 1 (Code for Race) and 2 (Description of Race) are loaded when the file is built. Item 3 (Sum of Specimens by Code for Race) is updated each time item 1 is entered during the first batch of data.

COUNTY NAME FILE (Table B-18)

Items 1 (County Code) and 2 (County Name) are loaded when this file is built. This file will provide the county name any time a county code is accessed.

WORK TIME UNITS FILE (Table B-19)

Items 1 through 3 are loaded when the file is built. Items 4 and 5 would be calculated by hand and loaded when the file is built.

LABORATORIAN IDENTIFICATION FILE (Table B-20)

Items 1 (Laboratorian Identification) and 2 (Laboratorian Name) are loaded when the file is built.

PROGRAM NAME FILE (Table B-21)

Items 1 (Program Code) and 2 (Program Name) are loaded when this file is built.

UNSATISFACTORY SPECIMEN FILE (Table B-22)

This file would be built only as a specimen is found to be unsatisfactory. Each time an item 1 (Unsatisfactory Specimen Code) is loaded to this file in the post-test phase, an appropriate sum would be updated.

LABORATORY REFERENCE FILE (Table B-23)

This file would be built only as a specimen is referred outside a state public health laboratory. Items 1 (Code for Type Laboratory) and 3 (Test Code) would be entered and the proper summation of item 4 would be updated.

EPIDEMIOLOGY FILE (Table B-24)

This file would be built only as epidemiological interest is developed in a specimen. It is estimated that 5,000 specimens annually will be of epidemiological interest.

REFERRED SPECIMEN FILE (Table B-25)

This file would be built only as a specimen is referred outside a state public health laboratory. Items 1 through 7 are loaded to this file as a specimen is referred. Items 8 through 10 are loaded to this file as the referred specimen results are returned to the state public health laboratory. It is estimated that 5,000 specimens annually will be referred outside the state public health laboratory.

STATE FILE (Table B-26)

This file would be built as the system is first set up.

TEST RESULT FILE (Table B-27)

This file would be built as the system is first set-up. It is anticipated that very few changes, additions, or deletions would be made to this file.

COUNTRY FILE (Table B-28)

This file would be built as the system is first set up.

WORK TIME UNITS PROCEDURES FILE (Table B-29)

The file would be built as the system is first set up. Any changes, additions, or deletions would be made annually.

TABLE B-4

LOG/WORKSHEET QUEUE FILE

Item No.	Alphanumeric Code*	Item Name
1	AA	Lab Subarea
2	NNNNNNAAAA	Accession Number
3	NNNNNN	Date Received
4	NN	Program Number
5	A	Acute/Convalescent
6	AAAAA AAAAA AAAAA AAAAA AAAAA	Patient Name
7	NNNNNN	Patient DOB
8	A	Patient Sex
9	NNNNN NNNNA	Submitter (submitter ID)
10	NNN	Submitter County Code
11	NNN	Test Requested Code
12	NNN	Specimen Type Code
13	NNN	Specimen Source Code
14	NN	Animal Type Code
15	A	Human Exposure
16	N	Patient Race
17	A	Clinical or Referred Specimen

*A = Alphabetic characters
*N = Numeric characters

This file includes: 80 characters per queue, 160,000 characters per day, plus 16,000 work-in-progress items per day (assuming a 10% overflow) for a total of 176,000 characters per day.

TABLE B-5

PROGRAM SERVED FILE

Item No.	Alphanumeric Code*	File Item Name
1	NN	Program Code (developed by user)
2	AAAAA AAAAA	Program Name
3	NNN	County Code of Submitter
4	AA	Laboratory Subarea
		Work Done By:
5	NNNNNN (AANNNNN)	a. Number of tests by laboratory subarea by submitter county within program
6	NNNNNN (AANN)	b. Number of tests by laboratory subarea by program
7	NNNNNN (NN)	c. Total tests by program
8	NNNNNNN (NN)	d. Dollar volume by program
9	NNN	Test Requested (to get test cost)

*A = alphabetic characters
*N = numeric characters

Number of characters annually: 3,346,000

TABLE B-6

COUNTY SERVED FILE

Item No.	Alphanumeric Code*	File Item Name
1	NNN	County Code of Submitter (developed by user)
2	AAAAA AAAAA AAAAA	Submitter County Name
3	NN	Program Code
4	AA	Laboratory Subarea
		Work Done by:
5	NNNNNN (AANNNNN)	a. Number of tests by laboratory subarea by program within submitter county
6	NNNNNN (AANNN)	b. Number of tests by laboratory subarea by county of submitter
7	NNNNNN (NNN)	c. Total tests by county of submitter
8	NNNNNNN (NNN)	d. Dollar volume by county of submitter
9	NNN	Test Requested (to get test cost)

A* = Alphabetic characters
N* = Numeric characters

Number of characters annually: 3,363,000

TABLE B-7

SUBMITTER IDENTIFICATION FILE

Item No.	Alphanumeric Code*	File Item Name
1	NNNNN NNNNA	Submitter Identification (A = D Doctor subfile) (A = I Institution subfile) (A = L Local health facility subfile)
2	AAAAA AAAAA AAAAA AAAAA AAAAA	Submitter Name
3	NNNNN AAAAA AAAAA AAAAA AAAAA	Submitter Street
4	AAAAA AAAAA AAAAA AAAAA	Submitter City
5	NNN	County Code of Submitter
6	AA	State Code
7	NNNNN NNNN	Zip Code
8	AA	Laboratory Subarea
		Work Done By:
9	NNNNNN (AA subarea)	a. Number of tests by laboratory subarea by submitter
10	NNNNNN	b. Number of tests by submitter
11	NNNNNNN	c. Dollar volume by submitter
12	NNN	Test Requested (to get test cost)

*A = alphabetic characters
*N = numeric characters

Number of characters annually: 4,732,000 for 20,000 submitters

TABLE B-8

ANIMAL TYPE FILE

Item	Alphanumeric Code*	File Item Name
1	NN	Animal Type Code
2	A	Human Exposure
3	AAAAA AAAAA AAAAA AAAAA	Animal Type Name
4	NNNN	Number of Animals by Type
5	NNN	Number of Positives by Type
6	NNN	Number of Human Exposures by Type
7	NN	Number of Human Exposures Which Were Positive by Type
8	NNN	Number of Animals
9	NNN	Number of Positives
10	NNN	Number of Human Exposures
11	NN	Number of Human Exposures Which Were Positive

*A = alphabetic
*N = numeric

ANIMAL TYPE CODE

Code	Title
10	DOG
11	CAT
12	COW
13	HORSE
14	BAT
15	FOX
16	RACCOON
17	MOUSE
18	RAT
19	HAMSTER
20	SKUNK
21	COYOTE
22	BOBCAT
23	OTHER

Number of characters annually: 46,000

TABLE B-9

SPECIMEN COUNT FILE

Item	Alphanumeric Code*	File Item Name
1	AA	Laboratory Area
2	AA	Laboratory Subarea
3	NNNN (AA)	Sum of Specimens Received Daily by Laboratory Subarea
4	NNNN (AA)	Sum of Clinical Specimens Received Daily by Laboratory Subarea
5	NNNNNNN (AA)	Year To Date Sum of Clinical Specimens by Laboratory Subarea
6	NNNN (AA)	Sum of Referred Specimens Received Daily by Laboratory Subarea
7	NNNNNNN (AA)	Year To Date Sum of Referred Specimens by Laboratory Subarea
8	NNNNNNN (AA)	Year To Date Sum of Specimens Received by Laboratory Subarea
9	NNNN (AA)	Sum of Specimens Received Daily by Laboratory Area
10	NNNN (AA)	Sum of Clinical Specimens Received Daily by Laboratory Area
11	NNNNNNN (AA)	Year To Date Sum of Clinical Specimens by Laboratory Area
12	NNNN (AA)	Sum of Referred Specimens Received Daily by Laboratory Area
13	NNNNNNN (AA)	Year To Date Sum of Referred Specimens by Laboratory Area
14	NNNNNNN (AA)	Year To Date Sum of Specimens Received by Laboratory Area
15	NNNN	Sum of Specimens Received Daily by Laboratory

16	NNNN	Sum of Clinical Specimens Received Daily by Laboratory
17	NNNNNNN	Year To Date Sum of Clinical Specimens by Laboratory
18	NNNN	Sum of Referred Specimens Received Daily by Laboratory
19	NNNNNNN	Year To Date Sum of Referred Specimens by Laboratory
20	NNNNNNN	Year Sum of Specimens Received by Laboratory

*A = alphabetic
*N = numeric

Number of characters annually: 1,100

TABLE B-10

SEXUALLY TRANSMITTED DISEASES FILE

Item No.	Alphanumeric Code*	File Item Name
1	NN	Laboratory Subarea
2	NN	Reason for Test Code
3	AAAAA AAAAA AAAAA AAAAA AAAAA AAAAA A	Reason for Test (31 characters for each reason in syphilis) (19 characters for each reason in Gonococcus)
4	NNNNNN (NNA)	Number of Tests by Reason for Test by Syphilis or Gonococcus

*A = alphabetic
*N = Numeric

1 REASON FOR TEST CODE

Code	Title
10	CONTACT
11	PREMARITAL
12	PRENATAL
13	VOLUNTEER
14	SURVEY
15	BLOOD DONOR
16	INPATIENT
17	OUTPATIENT
18	EMERGENCY ROOM
19	MILITARY
20	EMPLOYMENT
21	JAIL
22	FOOD HANDLER
23	LICENSURE
24	MIGRANT
25	MANPOWER TRAINING
26	SELF MOTIVATED
27	PHYSICIAN SUSPICION
28	RX CONTROL
29	SUSPECTED FALSE-POSITIVE REAGIN
30	RECHECK
31	DIAGNOSIS
32	TEST OF CURE
33	MEDICHECK
34	SYPHILIS CHECK
50	UNSPECIFIED

Number of characters annually: 1,600

TABLE B-11
SPECIMEN FILE

Item No.	Alphanumeric Code*	File Item Name
1	NNNNNNAAAA	Accession Number
2	NNN	Test Requested Code
3	NNNNN NNNNA	Submitter Name (Submitter Identification)
4	AAAAA AAAAA AAAAA AAAAA AAAAA	Patient Name
5	NNNNNN	Patient Date of Birth
6	NNNNNN	Date Specimen Collected
7	NNNNNN	Date Specimen Received
8	NNNNNN	Date of Preliminary Test Result
9	NNN	Preliminary Test Result
10	NNNNNN	Date of First Intermediate Test Result
11	NNN	First Intermediate Test Result
12	NNNNNN	Date of Second Intermediate Test Result
13	NNN	Second Intermediate Test Result
14	NNNNNN	Date of Final Test Result
15	NNN	Final Test Result
16	NNNNAA	Laboratorian Identification
17	AA	Laboratory Area (Subarea Where Split Specimen Sent Within Laboratory)
18	A	Yes /No Specimen Referred Outside Laboratory

TABLE B-11 Cont'd

TEST REQUESTED CODE

Code	Title
100	DIPHTHERIA
101	STREPTOCOCCUS
102	STAPHYLOCOCCUS
103	B PERTUSSIS
104	NEISSERIA MENINGITIDIS
105	KLEBSIELLA
106	H INFLUENZAE
107	LISTERIA
108	VIBRIO
109	SALMONELLA
110	SHIGELLA
111	E COLI
112	CAMPYLOBACTER
113	VDRL
114	RPR
115	FTA/ABS
116	MHA/TP
117	DFATP
118	FADF
119	LEGIONNAIRES
120	ASO
121	CRP
122	LEPTOSPIROSIS
123	BRUCELLOSIS
124	TULAREMIA
125	HISTO
126	BLASTO
127	COCCIDIO
128	CRYPTO
129	TOXOPLASMOSIS
130	AMEBIASIS
131	TRICHINOSIS
132	HERPES SIMPLEX
133	CMV
134	MYCOPLASMA
135	EB VIRUS
136	ARBOVIRUS
137	MONONUCLEOSIS
138	HEPATITIS A
139	HEPATITIS B
140	RICKETTSIAL
141	POLIOMYELITIS
142	RUBELLA
143	RUBEOLA
144	MUMPS
145	INFLUENZA

TABLE B-11 Cont'd

146	VARICELLA
147	CBC
148	HGB
149	HCT
150	WBC
151	RBC
152	MCV
153	MCHC
154	BLOOD GROUPING (ABO)
155	RH FACTOR
156	RH ANTIBODY
157	DIFFERENTIAL
158	PLATELETS
159	MCH
160	RETICULOCYTE COUNT
161	PROTHROMBIN TIME
162	QUANTITATION
163	SICKLE CELL SOLUBILITY
164	HGB ELECTROPHORESIS
165	ERYTHROCYTE PROTOPORPHYRIN
770	NA-OTHER
771	SE-OTHER
773	EN-OTHER
780	TP-OTHER
781	BF-OTHER
782	FU-OTHER
783	PL-OTHER
784	VR-OTHER
785	HE-OTHER

*A = alphabetic
*N = numeric

Number of characters annually: 55,500,000

TABLE B-12

PATIENT HISTORY FILE

Item No.	Alphanumeric Code*	File Item Name	
1	AAAAA AAAAA AAAAA AAAAA AAAAA	Patient Name	
2	NNNNN AAAAA AAAAA AAAAA AAAAA	Patient Street	
3	AAAAA AAAAA AAAAA AAAAA	Patient City	
4	AAAAA AAAAA AAAAA	Patient County	
5	AA	Patient State	
6	NNNNN NNNN	Patient Zip Code	
7	NNNNNN	Patient Date of Birth	
8	A	Patient Sex	
9	NNNNNN NN	Cytology Date and Class	Two Most Recent
10	NNNNNN NN	Cytology Date and Class	
11	NNN	Test Code	
12	NNNNN NNNNA	Submitter Identification	
13	NNN	Test Result	
14	NNNNN	Date Test Reported	Two Most Recent Tests Not Cytology
15	NNN	Test Code	
16	NNNNN NNNNA	Submitter Identification	
17	NNN	Test Result	
18	NNNNNN	Date Test Reported	
19	NNN	Number of Tests Done for this Patient	

*A = alphabetic
*N = Numeric

Number of characters annually: 84,500,000

TABLE B-13

SPECIMEN AND CULTURE SOURCE FILE

Item No.	Alphanumeric Code*	File Item Name
1	NN	Specimen and Culture Source Code
2	AAAAA AAAAA AAAAA AAAAA	Specimen and Culture Source Name
3	NNNNNNN (NN)	Sum of Specimens by Source

SPECIMEN AND CULTURE SOURCE CODE

Code	Title
10	NOSE
11	THROAT
12	BLOOD
13	WHOLE BLOOD
14	GASTRIC
15	GASTRIC WASHING
16	SERUM
17	SPUTUM
18	SPUTUM (NATURAL)
19	SPUTUM (NEBULIZER)
20	URINE
21	CSF
22	HAIR
23	SKIN
24	SKIN SCRAPING
25	STOOL
26	FOOD
27	WOUND
28	EXUDATE
29	TISSUE
30	RECTAL
31	GENITO-URINARY
32	NAILS
33	ABSCESS
34	NASOPHARYNGEAL
35	LYMPH NODES
36	AUTOPSY
37	BIOPSY
38	VESICULAR FLUID
39	LESION
40	MOSQUITO
41	PLASMA

TABLE B-13 Cont'd

Code	Title
70	NA-OTHER
71	SE-OTHER
72	TB-OTHER
73	EN-OTHER
74	GC-OTHER
75	MB-OTHER
76	MY-OTHER
78	VI-OTHER

*A = Alphabetic
*N = Numeric

Permanent 1,240 characters

TABLE B-14

SPECIMEN TYPE FILE

Item No.	Alphanumeric Code*	File Item Name
1	NN	Specimen Type Code
2	AAAAA AAAAA AAAAA AAAAA AAAAA AAAAA	Specimen Type Name
3	NNNNNNN (NN)	Sum of Specimens by Type

SPECIMEN TYPE CODE

1

Code	Title
10	THROAT CULTURE
11	THROAT SWAB
12	NASAL SWAB
13	SWAB-TRANS MEDIA
14	ARTHROPOD
15	BLOOD SMEAR
16	FECES (CELLULOSE TAPE)
17	SERUM
18	CSF
19	WHOLE BLOOD
20	PLASMA
70	NA-OTHER
77	PS-OTHER
80	TP-OTHER
82	FU-OTHER
85	HE-OTHER

*A = Alphabetic
*N = Numeric

Permanent 700 characters

TABLE B-15

WORK TIME UNITS/LABORATORY AREA FILE

Item No.	Alphanumeric Code*	File Item Name
1	AA	Laboratory Area (developed by user)
2	AA	Laboratory Subarea (developed by user)
3	NNN	Test Code (test requested - See Table 11)
4	NNNN (NNN)	Work Time Units/Test/Batch Size (developed by user)
5	NNN.NN (NNN)	Cost/Test
6	NNNNNNN.N (AA)	Sum of Work Time Units/Laboratory Subarea
7	NNNNNNN.N (AA)	Sum of Work Time Units/Laboratory Area
8	NNNNNNN.N (AA)	Sum of Work Time Units/Laboratory
9	NNNNNNN (AA)	Cost of Work/Laboratory Subarea
10	NNNNNNN (AA)	Cost of Work/Laboratory Area
11	NNNNNNN	Cost of Work/Laboratory

*A = Alphabetic
*N = Numeric

Number of characters annually: 1,900

TABLE B-16

TEST REQUESTED FILE

Item No.	Alphanumeric Code*	File Item Name
1	NNN	Test Code (See Table B-11)
2	AAAAA AAAAA AAAAA AAAAA	Test Name
3	NNNNNNN	Sum of Tests by Test Type

*A = alphabetic
*N = numeric

Permanent 2,300 characters (summations would be renewed annually)

TABLE B-17

RACE FILE

Item No.	Alphanumeric Code*	File Item Name
1	N	Code for Race
2	AAAAA AAAAA AAAAA AAAAA AAAAA AAAAA AAA	Description of Race
3	NNNNNNN	Sum of Specimens by Code for Race

RACE CODE

1

Code	Title
1	WHITE
2	BLACK
3	HISPANIC
4	AMERICAN INDIAN/ALASKAN NATIVE
5	ASIAN/PACIFIC ISLANDER
6	NOT SPECIFIED

*A = alphabetic
*N = numeric

Permanent 300 characters (summations would be renewed annually)

TABLE B-18

COUNTY NAME FILE

Item No.	Alphanumeric Code*	File Item Name
1	NNN	County Code (developed by user)
2	AAAAA AAAAA AAAAA	County Name (developed by user)

*A = alphabetic
*N = numeric

Permanent 2,900 characters

TABLE B-19

WORK TIME UNITS FILE

Item No.	Alphanumeric Code*	File Item Name
1	NNNNN	Procedure Code (see table B-29)
2	AA	Laboratory Area Code (developed by user)
3	NNNN	Work Time Units/Procedure/Batch Size
4	NN.NN	Cost/Work Time Unit for the Entire Laboratory
5	NN.NN	Cost/Work Time Unit for Each Laboratory Area

*A = alphabetic
*N = numeric

Permanent 5,300 characters (cost data would be renewed annually)

TABLE B-19 Cont'd

WORK TIME UNIT CODES

A____----BACTERIOLOGY

AA___-----	ENTERIC CULTURE
AAA1_-----	PRIMARY CULTURE
AAA11-------	B
AAA12-------	10
AAA13-------	5
AAA14-------	3
AAA15-------	3
AAB1_-----	SECONDARY CULTURE
AAB11-------	B
AAB12-------	10
AAB13-------	3
AAB14-------	3
AAB15-------	3
AAC1_-----	SUBCULTURE
AAC11-------	C
AAC12-------	3
AAC13-------	2
AAC14-------	2
AAC15-------	2
AAD1_-----	BIOCHEMICALS
AAD11-------	C
AAD12-------	10
AAD13-------	8
AAD14-------	6
AAD15-------	3
AAE1_-----	API
AAE11-------	B
AAE12-------	11
AAE13-------	10
AAE14-------	X
AAE15-------	X
AAF1_-----	ANTIGEN PREPARATION FOR SEROTYPING
AAF11-------	A
AAF12-------	8
AAF13-------	5
AAF14-------	X
AAF15-------	X
AAG1_-----	AGGLUTINATION GROUPING
AAG11-------	C
AAG12-------	12
AAG13-------	10
AAG14-------	8
AAG15-------	X
AAH1_-----	SEROTYPING (SIMPLE)
AAH11-------	C
AAH12-------	12
AAH13-------	10
AAH14-------	5
AAH15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

AAI1 ------	SEROTYPING (COMPLEX)
AAI11-------	D
AAI12-------	45
AAI13-------	25
AAI14-------	X
AAI15-------	X
AAJ1 ------	FLUORESCENT ANTIBODY
AAJ11-------	C
AAJ12-------	20
AAJ13-------	15
AAJ14-------	15
AAJ15-------	X
AB -----	THROAT AND NASAL PHARYNGEAL CULTURES
ABA1 ------	PRIMARY CULTURE POUR PLATE
ABA11-------	B
ABA12-------	5
ABA13-------	3
ABA14-------	3
ABA15-------	3
ABB1 ------	PRIMARY CULTURE STREAK PLATE
ABB11-------	B
ABB12-------	3
ABB13-------	2
ABB14-------	2
ABB15-------	2
ABC1 ------	FLUORESCENT ANTIBODY
ABC11-------	C
ABC12-------	15
ABC13-------	10
ABC14-------	7
ABC15-------	5
ABD1 ------	PREPARATION AND EXTRACTION
ABD11-------	C
ABD12-------	20
ABD13-------	12
ABD14-------	X
ABD15-------	X
ABE1 ------	SEROGROUPING (OTHER THAN GROUP A STREPTOCOCCI)
ABE11-------	C
ABE12-------	20
ABE13-------	13
ABE14-------	12
ABE15-------	X
ABF1 ------	SEROTYPING (M & T)
ABF11-------	C
ABF12-------	30
ABF13-------	20
ABF14-------	X
ABF15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

AC	DIPHTHERIA
ACA1	PRIMARY CULTURE
ACA11	B
ACA12	5
ACA13	3
ACA14	X
ACA15	X
ACB1	BIOCHEMICALS
ACB11	C
ACB12	5
ACB13	4
ACB14	X
ACB15	X
ACC1	TOXOGENICITY
ACC11	D
ACC12	35
ACC13	15
ACC14	X
ACC15	X
ACD1	DIRECT SMEAR
ACD11	C
ACD12	7
ACD13	5
ACD14	3
ACD15	X
AD	GC
ADA1	PRIMARY CULTURE
ADA11	C
ADA12	5
ADA13	4
ADA14	3
ADA15	3
ADB1	BIOCHEMICALS
ADB11	C
ADB12	5
ADB13	3
ADB14	X
ADB15	X
ADC1	FLUORESCENT ANTIBODY
ADC11	C
ADC12	15
ADC13	10
ADC14	7
ADC15	5
ADD1	MICROSCOPIC EXAM
ADD11	B
ADD12	5
ADD13	3
ADD14	3
ADD15	3

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

ADE1 ------		BETA LACTOMASE IODOMETRIC
ADE11-------		B
ADE12-------		3
ADE13-------		2
ADE14-------		X
ADE15-------		X
ADF1 ------		CEPHALOSPORIN
ADF11-------		B
ADF12-------		3
ADF13-------		2
ADF14-------		X
ADF15-------		X
AE -----	URINE	
AEA1 ------		QUANTITATIVE COUNT
AEA11-------		C
AEA12-------		10
AEA13-------		5
AEA14-------		3
AEA15-------		3
AEB1 ------		DEFINITIVE IDENTIFICATION
AEB11-------		C
AEB12-------		30
AEB13-------		25
AEB14-------		X
AEB15-------		X
AF -----	BLOOD	
AFA1 ------		PRIMARY
AFA11-------		C
AFA12-------		10
AFA13-------		10
AFA14-------		X
AFA15-------		X
AFB1 ------		DEFINITIVE IDENTIFICATION (AEROBIC)
AFB11-------		C
AFB12-------		30
AFB13-------		25
AFB14-------		X
AFB15-------		X
AG -----	SPINAL FLUID	
AGA1 ------		PRIMARY
AGA11-------		C
AGA12-------		7
AGA13-------		5
AGA14-------		3
AGA15-------		3
AGB1 ------		DEFINITIVE
AGB11-------		C
AGB12-------		30
AGB13-------		25
AGB14-------		X
AGB15-------		X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

AH -----	ANAEROBIC
AHA1 ------	PRIMARY
AHA11-------	D
AHA12-------	15
AHA13-------	12
AHA14-------	X
AHA15-------	X
AHB1 ------	DEFINITIVE
AHB11-------	D
AHB12-------	50
AHB13-------	45
AHB14-------	X
AHB15-------	X
AHC1 ------	GAS LIQUID CHROMATOGRAPHY
AHC11-------	D
AHC12-------	25
AHC13-------	20
AHC14-------	X
AHC15-------	X
AI -----	BACTERIOPHAGE TYPING
AIA1 ------	STAPHYLOCOCCUS PHAGE TYPING
AIA11-------	C
AIA12-------	X
AIA13-------	X
AIA14-------	9
AIA15-------	6
AIB1 ------	TYPHOID PHAGE TYPING
AIB11-------	C
AIB12-------	29
AIB13-------	14
AIB14-------	X
AIB15-------	X
AJ ----	ANTIBIOTIC SUSCEPTIBILITY
AJA1 ------	KIRBY-BAUER
AJA11-------	C
AJA12-------	15
AJA13-------	10
AJA14-------	10
AJA15-------	X
AK -----	MISCELLANEOUS
AKA1 ------	PRIMARY
AKA11-------	C
AKA12-------	7
AKA13-------	5
AKA14-------	3
AKA15-------	3
AKB1 ------	DEFINITIVE
AKB11-------	C
AKB12-------	30
AKB13-------	25
AKB14-------	X
AKB15------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

AKC1 ------	COAGULASE TEST
AKC11-------	B
AKC12-------	5
AKC13-------	2
AKC14-------	2
AKC15-------	X
AKD1 ------	DIRECT SMEAR
AKD11-------	C
AKD12-------	5
AKD13-------	3
AKD14-------	3
AKD15-------	X
AKE1 ------	FLAGELLA STAIN
AKE11-------	C
AKE12-------	15
AKE13-------	X
AKE14-------	X
AKE15-------	X
AKF1 ------	NEISSERIA MENINGIDITIS SEROGROUPING
AKF11-------	D
AKF12-------	5
AKF13-------	4
AKF14-------	4
AKF15-------	X
AKG1 ------	MISCELLANEOUS SEROGROUPING AND SEROTYPING
AKG11-------	D
AKG12-------	11
AKG13-------	8
AKG14-------	8
AKG15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd
B_____----MYCOBACTERIOLOGY

BA___	-----	MYCOBACTERIOLOGY
BAA1_	------	DIGESTION/DECONTAMINATION AND CONCENTRATION
BAA11	-------	B
BAA12	-------	13
BAA13	-------	10
BAA14	-------	10
BAA15	-------	10
BAB1_	------	PRIMARY CULTURE
BAB11	-------	B
BAB12	-------	7
BAB13	-------	5
BAB14	-------	3
BAB15	-------	3
BAC1_	------	DIRECT DRUG SENSITIVITY
BAC11	-------	C
BAC12	-------	8
BAC13	-------	6
BAC14	-------	6
BAC15	-------	X
BAD1_	------	SMEAR (FLUORESCENT)
BAD11	-------	C
BAD12	-------	8
BAD13	-------	6
BAD14	-------	6
BAD15	-------	6
BAE1_	------	SMEAR (ZIEHL-NEELSEN)
BAE11	-------	C
BAE12	-------	12
BAE13	-------	10
BAE14	-------	10
BAE15	-------	10
BAF1_	------	SUBCULTURE
BAF11	-------	C
BAF12	-------	6
BAF13	-------	4
BAF14	-------	4
BAF15	-------	X
BAG1_	------	PRIMARY BIOCHEMICALS
BAG11	-------	C
BAG12	-------	10
BAG13	-------	8
BAG14	-------	8
BAG15	-------	X
BAH1_	------	SECONDARY BIOCHEMICALS
BAH11	-------	D
BAH12	-------	15
BAH13	-------	12
BAH14	-------	X
BAH15	-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

BAI1 ------	INDIRECT DRUG SUSCEPTIBILITY
BAI11-------	D
BAI12-------	10
BAI13-------	8
BAI14-------	8
BAI15-------	X
BAJ1 ------	SPECIATION
BAJ11-------	D
BAJ12-------	10
BAJ13-------	X
BAJ14-------	X
BAJ15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

C	----PARASITOLOGY
CA	----- INTESTINAL
CAA1	------ ZINC SULPHATE
CAA11	------- B
CAA12	------- 10
CAA13	------- 10
CAA14	------- 8
CAA15	------- 6
CAB1	------ FORMALIN ETHER
CAB11	------- B
CAB12	------- 20
CAB13	------- 15
CAB14	------- 10
CAB15	------- 8
CAC1	------ MICROSCOPIC EXAMINATION
CAC11	------- D
CAC12	------- 12
CAC13	------- 10
CAC14	------- 10
CAC15	------- 10
CAD1	------ STAIN SMEAR
CAD11	------- D
CAD12	------- 45
CAD13	------- 30
CAD14	------- 30
CAD15	------- X
CAE1	------ PINWORM SLIDE
CAE11	------- B
CAE12	------- 5
CAE13	------- 3
CAE14	------- 3
CAE15	------- X
CAF1	------ STOLL EGG COUNT
CAF11	------- B
CAF12	------- 15
CAF13	------- 15
CAF14	------- 15
CAF15	------- X
CAG1	------ OCCULT BLOOD
CAG11	------- B
CAG12	------- 3
CAG13	------- 3
CAG14	------- X
CAG15	------- X
CB	----- BLOOD
CBA1	------ PARASITES (MICROSCOPIC)
CBA11	------- D
CBA12	------- 20
CBA13	------- 20
CBA14	------- X
CBA15	------- X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

CC_____	ARTHROPODS (IDENTIFICATION)
CCA1_____	MACROSCOPIC AND MICROSCOPIC EXAMINATION
CCA11_____	D
CCA12_____	30
CCA13_____	X
CCA14_____	X
CCA15_____	X
CCB1_____	HEMOLYMPH FOR RMSF
CCB11_____	C
CCB12_____	X
CCB13_____	15
CCB14_____	X
CCB15_____	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

D ----VIROLOGY	
DA -----	SPECIMEN PREPARATION
DAA1 ------	ARTHROPOD POOLS
DAA11-------	B
DAA12-------	8
DAA13-------	4
DAA14-------	2
DAA15-------	X
DAB1 ------	BLOOD
DAB11-------	B
DAB12-------	15
DAB13-------	6
DAB14-------	4
DAB15-------	X
DAC1 ------	CSF OR OTHER FLUIDS
DAC11-------	B
DAC12-------	6
DAC13-------	1
DAC14-------	1
DAC15-------	X
DAD1 ------	FECES
DAD11-------	B
DAD12-------	15
DAD13-------	10
DAD14-------	X
DAD15-------	X
DAE1 ------	THROAT WASHINGS AND THROAT SWABS
DAE11-------	B
DAE12-------	8
DAE13-------	5
DAE14-------	3
DAE15-------	X
DAF1 ------	TISSUE
DAF11-------	B
DAF12-------	20
DAF13-------	13
DAF14-------	X
DAF15-------	X
DAG1 ------	URINE
DAG11-------	B
DAG12-------	10
DAG13-------	7
DAG14-------	X
DAG15-------	X
DB -----	ANIMAL INOCULATION
DBA1 ------	NEWBORN LITTER
DBA11-------	C
DBA12-------	25
DBA13-------	20
DBA14-------	15
DBA15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

DBB1 ------	ADULT MICE
DBB11-------	C
DBB12-------	25
DBB13-------	20
DBB14-------	15
DBB15-------	X
DC -----	VIRUS IDENTIFICATION BY SERUM NEUTRALIZATION
DCA1 ------	NEWBORN LITTER
DCA11-------	C
DCA12-------	25
DCA13-------	20
DCA14-------	15
DCA15-------	X
DCB1 ------	ADULT MICE
DCB11-------	C
DCB12-------	25
DCB13-------	20
DCB14-------	15
DCB15-------	X
DCC1 ------	ANIMAL NEUTRALIZATION
DCC11-------	C
DCC12-------	30
DCC13-------	25
DCC14-------	X
DCC15-------	X
DCD1 ------	ANIMAL AUTOPSY
DCD11-------	C
DCD12-------	20
DCD13-------	15
DCD14-------	15
DCD15-------	X
DD -----	EGG INOCULATION
DDA1 ------	AL-AM
DDA11-------	C
DDA12-------	15
DDA13-------	8
DDA14-------	5
DDA15-------	X
DDB1 ------	CAM
DDB11-------	C
DDB12-------	20
DDB13-------	12
DDB14-------	X
DDB15-------	X
DE -----	EGG HARVEST
DEA1 ------	AL
DEA11-------	C
DEA12-------	8
DEA13-------	6
DEA14-------	4
DEA15-------	4

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

DEB1 ------	AM
DEB11-------	C
DEB12-------	12
DEB13------	10
DEB14-------	8
DEB15-------	8
DEC1 ------	CAM
DEC11-------	C
DEC12-------	12
DEC13-------	10
DEC14-------	8
DEC15-------	X
DF -----	TISSUE CULTURE
DFA1 ------	CELL PROPAGATION TRANSFER (NO. OF PROPAGATION BOTTLES)
DFA11-------	C
DFA12-------	26
DFA13-------	14
DFA14-------	X
DFA15-------	X
DFB1 ------	CELL PROPAGATION TUBE PREPARATION (PER BOTTLE)
DFB11-------	C
DFB12-------	31
DFB13-------	20
DFB14-------	15
DFB15-------	X
DFC1 ------	INOCULATION
DFC11-------	C
DFC12-------	10
DFC13-------	7
DFC14-------	4
DFC15-------	4
DFD1 ------	CPE EXAMINATION (CYTOPATHOGENIC EFFECT)
DFD11-------	C
DFD12-------	12
DFD13-------	10
DFD14-------	10
DFD15-------	10
DFE1 ------	HEMAGGLUTINATION (HA)
DFE11-------	C
DFE12-------	20
DFE13-------	15
DFE14-------	X
DFE15-------	X
DFF1 ------	HEMAGGLUTINATION INHIBITION (HI)
DFF11-------	C
DFF12-------	15
DFF13-------	10
DFF14-------	X
DFF15------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

DFG1 ------	HEMADSORPTION (HAD)
DFG11-------	C
DFG12-------	10
DFG13-------	6
DFG14-------	5
DFG15-------	X
DFH1 ------	HEMADSORPTION INHIBITION (HADI)
DFH11-------	C
DFH12-------	25
DFH13-------	20
DFH14-------	8
DFH15-------	X
DFI1 ------	TITRATION
DFI11-------	C
DFI12-------	30
DFI13-------	20
DFI14-------	20
DFI15-------	X
DFJ1 ------	NEUTRALIZATION CONTROLS
DFJ11-------	C
DFJ12-------	30
DFJ13-------	25
DFJ14-------	X
DFJ15-------	X
DFK1 ------	NEUTRALIZATION EACH ANTISERUM
DFK11-------	C
DFK12-------	12
DFK13-------	10
DFK14-------	8
DFK15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

E____----RABIES

EA__-----	RABIES
EAA1_------	STAIN SMEAR
EAA11-------	D
EAA12-------	31
EAA13-------	23
EAA14-------	18
EAA15-------	X
EAB1_------	FRA
EAB11-------	D
EAB12-------	45
EAB13-------	35
EAB14-------	25
EAB15-------	X
EAC1_------	MOUSE INOCULATION
EAC11-------	D
EAC12-------	24
EAC13-------	20
EAC14-------	X
EAC15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

F	----MYCOLOGY
GA	----- DIRECT EXAMINATION
FAA1	------ GRAM
FAA11	------- C
FAA12	------- 5
FAA13	------- 3
FAA14	------- 3
FAA15	------- X
FAB1	------ KINYOUN
FAB11	------- C
FAB12	------- 8
FAB13	------- 6
FAB14	------- X
FAB15	------- X
FAC1	------ WRIGHT'S
FAC11	------- C
FAC12	------- 4
FAC13	------- 3
FAC14	------- X
FAC15	------- X
FAD1	------ GIEMSA
FAD11	------- C
FAD12	------- 4
FAD13	------- 3
FAD14	------- X
FAD15	------- X
FAE1	------ PAS
FAE11	------- C
FAE12	------- 40
FAE13	------- 20
FAE14	------- X
FAE15	------- X
FAF1	------ LPCB
FAF11	------- C
FAF12	------- 5
FAF13	------- 5
FAF14	------- X
FAF15	------- X
FAH1	------ KOH
FAH11	------- C
FAH12	------- 5
FAH13	------- 5
FAH14	------- X
FAH15	------- X
FAI1	------ INDIA INK
FAI11	------- C
FAI12	------- 3
FAI13	------- 3
FAI14	------- X
FAI15	------- X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

FAJ1 ------	YEAST MORPHOLOGY
FAJ11-------	C
FAJ12-------	5
FAJ13-------	5
FAJ14-------	X
FAJ15-------	X
FAK1 ------	PRIMARY CULTURE
FAK11-------	C
FAK12-------	6
FAK13-------	5
FAK14-------	5
FAK15-------	X
FB___ ----	DEFINITIVE CULTURE
FBA1 ------	SLIDE CULTURE
FBA11-------	C
FBA12-------	30
FBA13-------	25
FBA14-------	X
FBA15-------	X
FBB1 ------	IN-VITRO HAIR
FBB11-------	C
FBB12-------	25
FBB13-------	20
FBB14-------	X
FBB15-------	X
FBC1 ------	FERMENTATION
FBC11-------	C
FBC12-------	10
FBC13-------	8
FBC14-------	X
FBC15-------	X
FBD1 ------	ASSIMILATION
FBD11-------	C
FBD12-------	20
FBD13-------	15
FBD14-------	X
FBD15-------	X
FBE1 ------	GERM TUBE TEST
FBE11-------	C
FBE12-------	5
FBE13-------	5
FBE14-------	X
FBE15-------	X
FBF1 ------	CELL WALL ANALYSIS
FBF11-------	D
FBF12-------	54
FBF13-------	X
FBF14-------	X
FBF15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

FBG1 ------	SUBCULTURE
FBG11-------	C
FBG12-------	5
FBG13-------	5
FBG14-------	X
FBG15-------	X
FC -----	ANIMAL
FCA1 ------	ANIMAL INOCULATION (IP OR IV)
FCA11-------	C
FCA12-------	25
FCA13-------	20
FCA14-------	15
FCA15-------	X
FCB1 ------	ANIMAL AUTOPSY
FCB11-------	C
FCB12-------	20
FCB13-------	15
FCB14-------	15
FCB15-------	X
FD -----	FLUORESCENT ANTIBODY
FDA1 ------	FLUORESCENT ANTIBODY
FDA11-------	C
FDA12-------	15
FDA13-------	10
FDA14-------	7
FDA15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

G____----IMMUNOLOGY

GA___-----	SYPHILIS SEROLOGY
GAA1_------	ART QUALITATIVE
GAA11-------	B
GAA12-------	X
GAA13-------	X
GAA14-------	X
GAA15-------	1
GAB1_------	ART QUANTITATIVE
GAB11-------	B
GAB12-------	X
GAB13-------	X
GAB14-------	1
GAB15-------	1
GAC1_------	DARKFIELD
GAC11-------	C
GAC12-------	30
GAC13-------	20
GAC14-------	X
GAC15-------	X
GAD1_------	DIRECT FLUORESCENT ANTIBODY FOR TREPONEMA PALLIDUM
GAD11-------	C
GAD12-------	55
GAD13-------	40
GAD14-------	X
GAD15-------	X
GAE1_------	FTA-ABS
GAE11-------	C
GAE12-------	X
GAE13-------	X
GAE14-------	12
GAE15-------	X
GAF1_------	FTA-CSF
GAF11-------	C
GAF12-------	X
GAF13-------	12
GAF14-------	12
GAF15-------	X
GAG1_------	FTA-IGM (SERUM)
GAG11-------	C
GAG12-------	X
GAG13-------	15
GAG14-------	15
GAG15-------	X
GB___-----	MICROHEMAGGLUTINATION
GBA1_------	QUALITATIVE MANUAL
GBA11-------	B
GBA12-------	X
GBA13-------	2
GBA14-------	2
GBA15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

GBB1 ------	QUANTITATIVE MANUAL
GBB11-------	B
GBB12-------	6
GBB13-------	3
GBB14-------	2
GBB15-------	X
GBC1 ------	QUANTITATIVE AUTOMATED
GBC11-------	B
GBC12-------	X
GBC13-------	2
GBC14-------	1
GBC15-------	X
GBD1 ------	RPR/RST QUALITATIVE
GBD11-------	B
GBD12-------	X
GBD13-------	1
GBD14-------	1
GBD15-------	1
GBE1 ------	RPR/RST QUANTITATIVE
GBE11-------	B
GBE12-------	4
GBE13-------	1.2
GBE14-------	1.2
GBE15-------	1.2
GBF1 ------	SPINAL FLUID PROTEIN
GBF11-------	B
GBF12-------	15
GBF13-------	10
GBF14-------	X
GBF15-------	X
GBG1 ------	USR
GBG11-------	B
GBG12-------	6
GBG13-------	1.5
GBG14-------	1.5
GBG15-------	1.5
GBH1 ------	VDRL QUALITATIVE
GBH11-------	B
GBH12-------	X
GBH13-------	6
GBH14-------	4
GBH15-------	2
GBI1 ------	VDRL QUANTITATIVE
GBI11-------	B
GBI12-------	5
GBI13-------	5
GBI14-------	3
GBI15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

GBJ1 ------	VDRL SPINAL FLUID QUALITATIVE
GBJ11-------	8
GBJ12-------	4
GBJ13-------	4
GBJ14-------	2
GBJ15-------	2
GBK1 ------	VDRL SPINAL FLUID QUANTITATIVE
GBK11-------	B
GBK12-------	5
GBK13-------	5
GBK14-------	3
GBK15-------	X
GC___ -----	VIRAL AND RICKETTSIAL
GCA1 ------	HI MICRO-MANUAL (1 ANTIGEN, E.G., RUBELLA)
GCA11-------	C
GCA12-------	X
GCA13-------	7
GCA14-------	5
GCA15-------	5
GCB1 ------	HI MICRO MANUAL (2-6 ANTIGENS, ARBOVIRUS, INFLUENZA, ETC)
GCB11-------	C
GCB12-------	X
GCB13-------	10
GCB14-------	7
GCB15-------	7
GCC1 ------	HI MICRO-MANUAL (MUMPS)
GCC11-------	C
GCC12-------	X
GCC13-------	7
GCC14-------	5
GCC15-------	X
GCD1 ------	HI MICRO-MANUAL (RUBEOLA)
GCD11-------	C
GCD12-------	X
GCD13-------	7
GCD14-------	5
GCD15-------	X
GCE1 ------	RUBACELL
GCE11-------	B
GCE12-------	20
GCE13-------	5
GCE14-------	4
GCE15-------	4
GCF1 ------	RUBINDEX
GCF11-------	B
GCF12-------	X
GCF13-------	7
GCF14-------	5
GCF15-------	5

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

GCG1 ------	HI MICRO SEMI-AUTOMATED (RUBELLA)
GCG11-------	C
GCG12-------	X
GCG13-------	X
GCG14-------	8
GCG15-------	1
GCH1 ------	COMPLEMENT FIXATION-MICRO MANUAL
GCH11-------	C
GCH12-------	X
GCH13-------	15
GCH14-------	10
GCH15-------	X
GCI1 ------	COMPLEMENT FIXATION - MICRO AUTOMATED
GCI11-------	C
GCI12-------	X
GCI13-------	X
GCI14-------	2
GCI15-------	1
GCJ1 ------	INDIRECT FLUORESCENT ANTIBODY
GCJ11-------	C
GCJ12-------	20
GCJ13-------	15
GCJ14-------	12
GCJ15-------	X
GCK1 ------	SERUM NEUTRALIZATION
GCK11-------	C
GCK12-------	25
GCK13-------	20
GCK14-------	15
GCK15-------	X
GCL1 ------	HETEROPHILE ANTIBODY-TUBE (INFECTIOUS MONONUCLEOSIS)
GCL11-------	C
GCL12-------	20
GCL13-------	18
GCL14-------	15
GCL15-------	X
GCM1 ------	HETEROPHILE ANTIBODY-SLIDE (INFECTIOUS MONONUCLEOSIS)
GCM11-------	B
GCM12-------	12
GCM13-------	9
GCM14-------	7
GCM15-------	X
GCN1 ------	OX CELL HEMOLYSIN
GCN11-------	C
GCN12-------	X
GCN13-------	6
GCN14-------	5
GCN15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

GCO1 ------	EBV
GCO11-------	D
GCO12-------	40
GCO13-------	20
GCO14-------	X
GCO15-------	X
GD --------	FUNGAL
GDA1 ------	COMPLEMENT FIXATION-MICRO-MANUAL
GDA11-------	C
GDA12-------	X
GDA13-------	15
GDA14-------	10
GDA15-------	X
GDB1 ------	COMPLEMENT FIXATION-MICRO-AUTOMATED
GDB11-------	C
GBD12-------	X
GDB13-------	X
GDB14-------	2
GDB15-------	1
GDC1 ------	LATEX SLIDE
GDC11-------	C
GDC12-------	12
GDC13-------	9
GDC14-------	7
GDC15-------	X
GDD1 ------	LATEX TUBE
GDD11-------	C
GDD12-------	15
GDD13-------	12
GDD14-------	10
GDD15-------	X
GDE1 ------	AGAR GEL DIFFUSION
GDE11-------	C
GDE12-------	15
GDE13-------	10
GDE14-------	X
GDE15-------	X
GE -----	BACTERIAL FEBRILE AGGLUTINATION
GEA1 ------	SLIDE AGGLUTINATION TEST
GEA11-------	C
GEA12-------	15
GEA13-------	5
GEA14-------	5
GEA15-------	X
GEB1 ------	TUBE AGGLUTINATION TEST
GEB11-------	C
GEB12-------	20
GEB13-------	15
GEB14-------	15
GEB15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

GF_____	PARASITOLOGICAL
GFA1_____	TOXOPLASMOSIS (IFA)
GFA11_____	C
GFA12_____	20
GFA13_____	15
GFA14_____	12
GFA15_____	X
GFB1_____	TOXOPLASMOSIS (IHA)
GFB11_____	C
GFB12_____	24
GFB13_____	19
GFB14_____	14
GFB15_____	X
GFC1_____	TOXOPLASMOSIS (ENZYME IMMUNOASSAY)
GFC11_____	B
GFC12_____	X
GFC13_____	10
GFC14_____	5
GFC15_____	2
GFD1_____	SLIDE AGGLUTINATION
GFD11_____	C
GFD12_____	15
GFD13_____	15
GFD14_____	10
GFD15_____	X
GG_____	MISCELLANEOUS
GGA1_____	ENZYME IMMUNOASSAY (HEPATITIS)
GGA11_____	B
GGA12_____	X
GGA13_____	10
GGA14_____	5
GGA15_____	2
GGB1_____	RA FACTOR (TUBE OR SLIDE)
GGB11_____	C
GGB12_____	12
GGB13_____	9
GGB14_____	7
GGB15_____	X
GGC1_____	CRP
GGC11_____	B
GGC12_____	X
GGC13_____	X
GGC14_____	1
GGC15_____	X
GGD1_____	ASO MICRO-MANUAL
GGD11_____	C
GGD12_____	10
GGD13_____	7
GGD14_____	4
GGD15_____	3

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

GGE1 ------	ASO MACRO
GGE11-------	C
GGE12-------	15
GGE13-------	12
GGE14-------	10
GGE15-------	X
GGF1 ------	RIA FOR HB AG (HEPATITIS ANTIGEN)
GGF11-------	C
GGF12-------	X
GGF13-------	4
GGF14-------	3
GGF15-------	X
GGG1 ------	PREGNANCY TEST SLIDE
GGG11-------	C
GGG12-------	5
GGG13-------	3
GGG14-------	X
GGG15-------	X
GGH1 ------	PREGNANCY TEST TUBE
GGH11-------	C
GGH12-------	15
GGH13-------	10
GGH14-------	X
GGH15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

H____----MILK

HA___-----	MILK
HAA1_------	PLATE COUNT
HAA11-------	B
HAA12-------	20
HAA13-------	8
HAA14-------	6
HAA15-------	6
HAB1_------	COLIFORM COUNT
HAB11--------	B
HAB12-------	15
HAB13-------	7
HAB14-------	5
HAB15-------	5
HAC1_------	PHOSPHATASE
HAC11-------	C
HAC12-------	25
HAC13-------	20
HAC14-------	8
HAC15-------	8
HAD1_------	MICROBIAL PHOSPHATASE
HAD11-------	C
HAD12-------	26
HAD13-------	24
HAD14-------	X
HAD15-------	X
HAE1_------	REACTIVATED PHOSPHATASE
HAE11-------	C
HAE12-------	35
HAE13-------	35
HAE14-------	X
HAE15-------	X
HAF1_------	BUTTERFAT
HAF11-------	B
HAF12-------	25
HAF13-------	20
HAF14-------	20
HAF15-------	X
HAG1_------	SOLIDS NOT FAT
HAG11-------	B
HAG12-------	X
HAG13-------	3
HAG14-------	3
HAG15-------	3

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

HAH1 ------	ADDED WATER MANUAL
HAH11-------	B
HAH12-------	20
HAH13-------	15
HAH14-------	10
HAH15-------	10
HAI1 ------	CRYOSCOPE AUTOMATED
HAI11-------	B
HAI12-------	X
HAI13-------	1
HAI14-------	1
HAI15-------	X
HAJ1 ------	MICROSCOPIC MASTITIS TEST (DMSCC)
HAJ11-------	C
HAJ12-------	14
HAJ13-------	11
HAJ14-------	8
HAJ15-------	8
HAK1 ------	WISCONSIN MASTITIS TEST
HAK11-------	B
HAK12-------	4
HAK13-------	3
HAK14-------	X
HAK15-------	X
HAL1 ------	AUTOMATED (COULTER COUNTER)
HAL11-------	C
HAL12-------	X
HAL13-------	7
HAL14-------	7
HAL15-------	7
HAM1 ------	PAPER DISC METHOD (INHIBITORY SUBSTANCES)
HAM11-------	C
HAM12-------	5
HAM13-------	3
HAM14-------	2
HAM15-------	2
HAN1 ------	CYLINDER ASSAY METHOD (INHIBITORY SUBSTANCES)
HAN11-------	C
HAN12-------	30
HAN13-------	25
HAN14-------	15
HAN15-------	15
HAO1 ------	DELVO TEST
HAO11-------	C
HAO12-------	X
HAO13-------	1
HAO14-------	1
HAO15-------	1

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

HAP1 ------	CONTAINER COUNT
HAP11-------	8
HAP12-------	15
HAP13-------	8
HAP14-------	6
HAP15-------	6

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

I____	----WATER
IA___	----- BACTERIOLOGY
IAA1_	------ MULTIPLE TUBE PRESUMPTIVE
IAA11	------- B
IAA12	------- 10
IAA13	------- 8
IAA14	------- 5
IAA15	------- 5
IAB1_	------ MULTIPLE TUBE CONFIRMED
IAB11	------- B
IAB12	------- 3
IAB13	------- 3
IAB14	------- 3
IAB15	------- 3
IAC1_	------ MULTIPLE TUBE COMPLETED
IAC11	------- C
IAC12	------- 10
IAC13	------- 10
IAC14	------- X
IAC15	------- X
IAD1_	------ MOST PROBABLE NUMBER (MPN)
IAD11	------- B
IAD12	------- 20
IAD13	------- 20
IAD14	------- 15
IAD15	------- 15
IAE1_	------ PLATE COUNT
IAE11	------- B
IAE12	------- 20
IAE13	------- 8
IAE14	------- 6
IAE15	------- 6
IAF1_	------ MEMBRANE FILTER (PER DILUTION) TOTAL COLIFORM
IAF11	------- B
IAF12	------- 10
IAF13	------- 8
IAF14	------- 7
IAF15	------- 5
IAG1_	------ MEMBRANE FILTER (PER DILUTION) FECAL COLIFORM
IAG11	------- B
IAG12	------- 10
IAG13	------- 8
IAG14	------- 7
IAG15	------- 5

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

IAH1 ------	MEMBRANE FILTER (PER DILUTION) FECAL STREP
IAH11-------	B
IAH12-------	10
IAH13-------	8
IAH14-------	7
IAH15-------	5
IAI1 ------	BIOLOGICAL SAMPLING AND ANALYSIS
IAI11-------	C
IAI12-------	20
IAI13-------	20
IAI14-------	X
IAI15-------	X
IB -----	WATER CHEMISTRY (PHYSICAL PROPERTIES)
IBA1 ------	COLOR
IBA11-------	B
IBA12-------	1
IBA13-------	1
IBA14-------	1
IBA15-------	1
IBB1 ------	ODOR
IBB11-------	B
IBB12-------	30
IBB13-------	15
IBB14-------	15
IBB15-------	10
IBC1 ------	TURBIDITY
IBC11-------	B
IBC12-------	9
IBC13-------	4
IBC14-------	3
IBC15-------	3
IBD1 ------	SETTLEABLE SOLIDS
IBD11-------	B
IBD12-------	2
IBD13-------	2
IBD14-------	2
IBD15-------	2
IBE1 ------	SUSPENDED SOLIDS
IBE11-------	B
IBE12-------	9
IBE13-------	9
IBE14-------	9
IBE15-------	9
IBF1 ------	TEMPERATURE
IBF11-------	B
IBF12-------	1
IBF13-------	1
IBF14-------	1
IBF15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

IC	WATER CHEMISTRY (CHEMICAL PROPERTIES)
ICA1	CATION AND ANION (SPECIFIC ELECTRODE)
ICA11	B
ICA12	X
ICA13	2
ICA14	2
ICA15	X
ICB1	DISSOLVED SOLIDS
ICB11	C
ICB12	3
ICB13	2
ICB14	2
ICB15	2
ICC1	TOTAL SOLIDS
ICC11	C
ICC12	10
ICC13	10
ICC14	10
ICC15	10
ICD1	HARDNESS
ICD11	B
ICD12	5
ICD13	2
ICD14	2
ICD15	X
ICE1	DISSOLVED OXYGEN (WINKLER METHOD)
ICE11	C
ICE12	7
ICE13	5
ICE14	5
ICE15	X
ICE2	DISSOLVED OXYGEN (ELECTRODE)
ICE21	C
ICE22	3
ICE23	3
ICE24	3
ICE25	X
ICF1	NITROGEN-KJELDAHL (MANUAL)
ICF11	C
ICF12	50
ICF13	30
ICF14	X
ICF15	X
ICG1	NITROGEN-AMMONIA (MANUAL)
ICG11	C
ICG12	20
ICG13	8
ICG14	5
ICG15	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

ICH1 ------	NITROGEN-NITRATE (MANUAL)
ICH11-------	C
ICH12-------	74
ICH13-------	11
ICH14-------	X
ICH15-------	X
ICI1 ------	NITROGEN-NITRITE (MANUAL)
ICI11-------	C
ICI12-------	52
ICI13-------	8
ICI14-------	X
ICI15-------	X
ICJ1 ------	NITROGEN-AMMONIA (AUTOMATED)
ICJ11-------	C
ICJ12-------	X
ICJ13-------	10
ICJ14-------	8
ICJ15-------	X
ICK1 ------	NITROGEN-NITRATE (AUTOMATED)
ICK11-------	C
ICK12-------	X
ICK13-------	10
ICK14-------	8
ICK15-------	X
ICL1 ------	NITROGEN-NITRITE (AUTOMATED)
ICL11-------	C
ICL12-------	X
ICL13-------	7
ICL14-------	7
ICL15-------	X
ICM1 ------	BIOLOGICAL OXYGEN DEMAND
ICM11-------	C
ICM12-------	25
ICM13-------	20
ICM14-------	20
ICM15-------	X
ICN1 ------	CHEMICAL OXYGEN DEMAND
ICN11-------	C
ICN12-------	9
ICN13-------	5
ICN14-------	5
ICN15-------	X
ICO1 ------	DETERGENT
ICO11-------	C
ICO12-------	35
ICO13-------	20
ICO14-------	X
ICO15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

ICP1 ------	ALKALINITY BICARBONATE-CARBONATE
ICP11-------	C
ICP12-------	5
ICP13-------	4
ICP14-------	4
ICP15-------	4
ICQ1 ------	ARSENIC (SODIUM BOROHYDRIDE)
ICQ11-------	C
ICQ12-------	40
ICQ13-------	8
ICQ14-------	8
ICQ15-------	X
ICQ2 ------	ARSENIC (SILVER DIETHYLDITHIOCARBAMATE)
ICQ21-------	C
ICQ22-------	X
ICQ23-------	10
ICQ24-------	X
ICQ25-------	X
ICR1 ------	FLUORIDE
ICR11-------	C
ICR12-------	X
ICR13-------	13
ICR14-------	10
ICR15-------	X
ICS1 ------	IONS (EXT.)
ICS11-------	C
ICS12-------	X
ICS13-------	25
ICS14-------	X
ICS15-------	X
ICT1 ------	PHENOL
ICT11-------	C
ICT12-------	30
ICT13-------	14
ICT14-------	11
ICT15-------	11
ICU1 ------	PH
ICU11-------	B
ICU12-------	X
ICU13-------	2
ICU14-------	2
ICU15-------	X
ICV1 ------	POTASSIUM
ICV11-------	C
ICV12-------	X
ICV13-------	3
ICV14-------	3
ICV15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

ICW1 ------	TOTAL ORGANIC CARBON
ICW11-------	D
ICW12-------	70
ICW13-------	22
ICW14-------	11
ICW15-------	11
ICX1 ------	ATOMIC ADSORP. SPECTROPHOTOMETER FLAME (FE, CU, MN, ZN)
ICX11-------	C
ICX12-------	10
ICX13-------	2
ICX14-------	2
ICX15-------	1
ICX2 ------	ATOMIC ADSORP. SPECTRO. GRAPHITE FURNACE (CD, CR, AG)
ICX21-------	C
ICX22-------	15
ICX23-------	15
ICX24-------	4
ICX25-------	X
ICY1 ------	ATOMIC ADSORP. SPECTRO. GRAPHITE FURNACE (PB, AR, SE)
ICY11-------	C
ICY12-------	60
ICY13-------	15
ICY14-------	15
ICY15-------	X
ICY2 ------	ATOMIC ADSOPR. SPECTRO. FLAMELESS FOR MERCURY
ICY21-------	C
ICY22-------	20
ICY23-------	12
ICY24-------	12
ICY25-------	X
ICY3 ------	ATOMIC ADSORP. SPECTRO. FLAMELESS FOR HG (COLD VAPOR)
ICY31-------	C
ICY32-------	60
ICY33-------	15
ICY34-------	15
ICY35-------	X
ICZ1 ------	ANALYSIS FOR NITRATES, NITRITES, CHLORIDES, AND HARDNESS
ICZ11-------	C
ICZ12-------	X
ICZ13-------	X
ICZ14-------	3
ICZ15-------	2

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

J____----FOOD

JA____-----	MICROBIOLOGY
JAA1_------	SPECIMEN PREPARATION
JAA11-------	B
JAA12-------	15
JAA13-------	12
JAA14-------	10
JAA15-------	X
JAB1_------	STAPHYLOCOCCUS COUNT
JAB11-------	C
JAB12-------	15
JAB13-------	12
JAB14-------	10
JAB15-------	X
JAC1_------	(ENTEROTOXIN DETERMINATION) FOOD EXTRACTION
JAC11-------	C
JAC12-------	120
JAC13-------	120
JAC14-------	X
JAC15-------	X
JAD1_------	(ENTEROTOXIN DETERMINATION) CULTURES
JAD11-------	C
JAD12-------	30
JAD13-------	30
JAD14-------	X
JAD15-------	X
JAE1_------	ENTEROBACTERIA DETERMINATION
JAE11-------	C
JAE12-------	29
JAE13-------	20
JAE14-------	16
JAE15-------	11
JAF1_------	ANAEROBIC CULTURE
JAF11-------	C
JAF12-------	70
JAF13-------	58
JAF14-------	58
JAF15-------	X
JAG1_------	STANDARD PLATE COUNT
JAG11-------	C
JAG12-------	20
JAG13-------	8
JAG14-------	6
JAG15-------	6

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

JAH1 ------	COLIFORM COUNT
JAH11-------	C
JAH12-------	20
JAH13-------	8
JAH14-------	6
JAH15-------	X
JAI1 ------	FOOD UTENSIL COUNT
JAI11-------	C
JAI12-------	10
JAI13-------	8
JAI14-------	6
JAI15-------	X
JAJ1 ------	RODAC PLATE SURFACE COUNT
JAJ11-------	C
JAJ12-------	X
JAJ13-------	2
JAJ14-------	2
JAJ15-------	X
JAK1 ------	ANAEROBIC TOXIN ASSAY
JAK11-------	C
JAK12-------	120
JAK13-------	100
JAK14-------	X
JAK15-------	X
JAL1 ------	MACROSCOPIC AND MICROSCOPIC EXAM (FILTH) SUGAR
JAL11-------	C
JAL12-------	20
JAL13-------	10
JAL14-------	10
JAL15-------	X
JAM1 ------	MACROSCOPIC AND MICROSCOPIC EXAM (FILTH) DAIRY
JAM11-------	C
JAM12-------	20
JAM13-------	10
JAM14-------	10
JAM15-------	X
JAN1 ------	MACROSCOPIC AND MICROSCOPIC EXAM (FILTH) BEVERAGE
JAN11-------	C
JAN12-------	7
JAN13-------	2
JAN14-------	2
JAN15------	X
JAO1 ------	MACROSCOPIC AND MICROSCOPIC EXAM (FILTH) CEREAL
JAO11-------	C
JAO12-------	80
JAO13-------	53
JAO14-------	51
JAO15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

JAP1 ------	MEAT SEROLOGY
JAP11-------	C
JAP12-------	23
JAP13-------	19
JAP14-------	X
JAP15-------	X
JB___ -----	FOOD CHEMISTRY
JBA1_------	SPECIMEN PREPARATION
JBA11-------	C
JBA12-------	30
JBA13-------	20
JBA14-------	10
JBA15-------	10
JBB1_------	QUALITATIVE SCREENING
JBB11-------	C
JBB12-------	30
JBB13-------	20
JBB14-------	20
JBB15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

K____----CYTOLOGY

KA___-----	CYTOLOGY	
KAA1_------		EXFOLIATIVE
KAA11-------		C
KAA12-------		X
KAA13-------		7
KAA14-------		7
KAA15-------		7
KAB1_------		CHROMOSOME ANALYSIS
KAB11-------		D
KAB12-------		1020
KAB13-------		675
KAB14-------		X
KAB15-------		X
KAC1_------		HEMOCCULT TEST
KAC11-------		B
KAC12-------		2
KAC13-------		1
KAC14-------		X
KAC15-------		X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

L____----HEMATOLOGY

LA____-----	HEMATOLOGY
LAA1_------	HEMOGLOBIN (MANUAL)
LAA11-------	C
LAA12-------	6
LAA13-------	3
LAA14-------	2
LAA15-------	X
LAA2_------	HEMOGLOBIN (COULTER HEMOGLOBINOMETER)
LAA21-------	B
LAA22-------	7
LAA23-------	2
LAA24-------	1
LAA25-------	1
LAB1_------	CITRATE AGAR HEMOGLOBIN ELECTROPHORESIS
LAB11-------	C
LAB12-------	9
LAB13-------	4
LAB14-------	4
LAB15-------	4
LAC1_------	HEMOGLOBIN ELECTROPHORESIS
LAC11-------	C
LAC12-------	X
LAC13-------	3
LAC14-------	3
LAC15-------	3
LAD1_------	SICKLE CELL SOLUBILITY TEST
LAD11-------	C
LAD12-------	2
LAD13-------	2
LAD14-------	1
LAD15-------	X
LAE1_------	A-2 QUANTITATION
LAE11-------	C
LAE12-------	60
LAE13-------	X
LAE14-------	X
LAE15-------	X
LAF1_------	F QUANTITATION
LAF11-------	C
LAF12-------	X
LAF13-------	17
LAF14-------	X
LAF15-------	X
LAG1_------	WHITE BLOOD CELL COUNT (MANUAL)
LAG11-------	C
LAG12-------	7
LAG13-------	5
LAG14-------	5
LAG15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

LAH1 ------	WHITE BLOOD CELL COUNT (AUTOMATED)
LAH11-------	B
LAH12-------	4
LAH13-------	1.5
LAH14-------	1
LAH15-------	1
LAI1 ------	RED BLOOD CELL COUNT (MANUAL)
LAI11-------	C
LAI12-------	10
LAI13-------	7
LAI14-------	7
LAI15-------	X
LAJ1 ------	RED BLOOD CELL COUNT (AUTOMATED)
LAJ11-------	B
LAJ12-------	4
LAJ13-------	1.5
LAJ14-------	1
LAJ15-------	1
LAK1 ------	COMPLETE BLOOD COUNT (WBC, RBC, HGC, HCT, MCV, MCH, MCHC)
LAK11-------	C
LAK12-------	1
LAK13-------	1
LAK14-------	1
LAK15-------	1
LAL1 ------	HEMATOCRIT (MICRO)
LAL11-------	C
LAL12-------	6
LAL13-------	2
LAL14-------	2
LAL15-------	X
LAM1 ------	DIFFERENTIAL CELL COUNT
LAM11-------	C
LAM12-------	10
LAM13-------	8
LAM14-------	8
LAM15-------	X
LAN1 ------	PLATELET COUNT
LAN11-------	C
LAN12-------	25
LAN13-------	5
LAN14-------	5
LAN15-------	X
LAO1 ------	SEDIMENTATION RATE
LAO11-------	C
LAO12-------	10
LAO13-------	5
LAO14-------	5
LAO15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

LAP1 ------	RETICULOCYTE
LAP11-------	C
LAP12-------	12
LAP13-------	5
LAP14-------	5
LAP15-------	X
LAQ1 ------	LE Cells
LAQ11-------	C
LAQ12-------	90
LAQ13-------	70
LAQ14-------	X
LAQ15-------	X
LAR1 ------	NASAL SMEAR EOSINOPHIL EXAMINATION
LAR11-------	C
LAR12-------	10
LAR13-------	5
LAR14-------	4
LAR15-------	4
LAS1 ------	SPUTUM-EOSINOPHIL EXAMINATION
LAS11-------	C
LAS12-------	45
LAS13-------	12
LAS14-------	4
LAS15-------	4

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

M____----IMMUNOHEMATOLOGY

MA__ ----- BLOOD TYPING
MAA1_ ------ GROUPING (ABO)
MAA11------- C
MAA12------- 5
MAA13------- 2
MAA14------- 2
MAA15------- 2
MAB1_ ------ RH TYPING
MAB11------- C
MAB12------- 5
MAB13------- 2
MAB14------- 2
MAB15------- 2
MAC1_ ------ INDIRECT COOMBS
MAC11------- C
MAC12------- 7
MAC13------- 5
MAC14------- 5
MAC15------- X
MAD1_ ------ ROOM TEMPERATURE REACTING ANTIBODIES (MN SYSTEM)
MAD11------- C
MAD12------- 35
MAD13------- 5
MAD14------- X
MAD15------- X
MAE1_ ------ COOMBS REACTIVE ANTIBODIES (SS, KELL & CELLANO, DUFFY & KIDD)
MAE11------- C
MAE12------- 80
MAE13------- 10
MAE14------- X
MAE15------- X
MB__ ----- RH ANTIBODIES
MBA1_ ------ DETECTION
MBA11------- C
MBA12------- 30
MBA13------- 5
MBA14------- 4
MBA15------- 4
MBB1_ ------ IDENTIFICATION
MBB11------- C
MBB12------- 30
MBB13------- 20
MBB14------- X
MBB15------- X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

MBC1 ------	TITRATION
MBC11-------	C
MBC12-------	30
MBC13-------	20
MBC14-------	X
MBC15-------	X
MBD1 ------	DIRECT COOMBS
MBD11-------	C
MBD12-------	6
MBD13-------	4
MBD14-------	X
MBD15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

N	----CHEMISTRY
NA	----- MANUAL
NAA1	------ GLUCOSE
NAA11	------- B
NAA12	------- 10
NAA13	------ 5
NAA14	------- 3
NAA15	------- X
NAB1	------ CHOLINESTERASE (A)
NAB11	------- B
NAB12	------- 43
NAB13	------- 28
NAB14	------- X
NAB15	------- X
NAB2	------ CHOLINESTERASE (B)
NAB21	------- B
NAB22	------- 35
NAB23	------- 14
NAB24	------- 10
NAB25	------- 10
NAC1	------ DIABETES SCREEN
NAC11	------- B
NAC12	------ X
NAC13	------- 1
NAC14	------- 1
NAC15	------- X
NAD1	------ EP SCREEN DIRECT FLUOROMETRIC ASSAY
NAD11	------- B
NAD12	------- 2
NAD13	------- 2
NAD14	------- 1
NAD15	------- 0.5
NAE1	------ EP EXTRACTION ASSAY
NAE11	------- C
NAE12	------- 40
NAE13	------- 10
NAE14	------- 5
NAE15	------- 5
NAF1	------ AA (DELVES)
NAF11	------- C
NAF12	------- 40
NAF13	------- 20
NAF14	------- 20
NAF15	------- X
NAG1	------ ASV (MEASURING AND DIGESTING)
NAG11	------- C
NAG12	------- X
NAG13	------- 14
NAG14	------- 7
NAG15	------- X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

NAH1 ------	ASV (WITHOUT DIGESTING)
NAH11-------	C
NAH12-------	5
NAH13-------	5
NAH14-------	X
NAH15-------	X
NAI1 ------	(URINALYSIS) CHEMICAL
NAI11-------	B
NAI12-------	5
NAI13-------	2
NAI14-------	2
NAI15-------	2
NAJ1 ------	(URINALYSIS) MICROSCOPIC
NAJ11-------	C
NAJ12-------	3
NAJ13-------	3
NAJ14-------	3
NAJ15-------	X
NB -----	CHEMISTRY AUTOMATED
NBA1 ------	BILIRUBIN, TOTAL
NBA11-------	C
NBA12-------	X
NBA13-------	3
NBA14-------	2
NBA15-------	2
NBB1 ------	CALCIUM (ATOMIC ABSORPTION)
NBB11-------	C
NBB12-------	X
NBB13-------	5
NBB14-------	2
NBB15-------	2
NBB2 ------	CALCIUM (CRESOLPHTHALEIN)
NBB21-------	C
NBB22-------	X
NBB23-------	4
NBB24-------	2
NBB25-------	2
NBC1 ------	CHLORIDE (COULOMETRIC)
NBC11-------	C
NBC12-------	X
NBC13-------	3
NBC14-------	2
NBC15-------	2
NBC2 ------	CHLORIDE (DIRECT FERRIC)
NBC21-------	C
NBC22-------	X
NBC23-------	4
NBC24-------	2
NBC25-------	2

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

NBD1 ------	CHOLESTEROL OR TRIGYLCERIDES (FLUOROMETRIC)
NBD11------	C
NBD12-------	X
NBD13-------	X
NBD14-------	3
NBD15-------	3
NBD2 ------	CHOLESTEROL OR TRIGLYCERIDES (ENZYMATIC)
NBD21-------	C
NBD22-------	X
NBD23-------	X
NBD24-------	2
NBD25-------	2
NBE1 ------	CREATININE
NBE11-------	C
NBE12-------	X
NBE13-------	X
NBE14-------	2
NBE15-------	2
NBF1 ------	GLUCOSE
NBF11-------	C
NBF12-------	X
NBF13-------	4
NBF14-------	2
NBF15-------	2
NBG1 ------	GLUCOSE/URIC ACID/BUN
NBG11-------	C
NBG12-------	X
NBG13-------	X
NBG14-------	2
NBG15-------	2
NBH1 ------	SGOT/SGPT
NBH11-------	C
NBH12-------	X
NBH13-------	6
NBH14-------	2
NBH15-------	2
NBI1 ------	URIC ACID
NBI11-------	C
NBI12-------	X
NBI13-------	X
NBI14-------	2
NBI15-------	2
NBJ1 ------	UREA NITROGEN
NBJ11-------	C
NBJ12-------	X
NBJ13-------	X
NBJ14-------	2
NBJ15-------	2

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

NBK1 ------	CLINICAL MULTIPHASIC SCREEN (12/60)
NBK11-------	C
NBK12-------	X
NBK13-------	X
NBK14-------	X
NBK15-------	2

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

O	----METABOLIC DISEASES
OA	----- BACTERIAL INBIBITION MANUAL
OAA1	------ PHENYLKETONURIA (PKU)
OAA11	------- B
OAA12	------- X
OAA13	------- 4
OAA14	------- 2
OAA15	------- X
OAB1	------ MAPLE SYRUP URINE DISEASE (MSUD)
OAB11	------- B
OAB12	------- X
OAB13	------- 4
OAB14	------- 2
OAB15	------- X
OAC1	------ HOMOCYSTINURIA
OAC11	------- B
OAC12	------- X
OAC13	------- 4
OAC14	------- 2
OAC15	------- X
OAD1	------ GALACTOSEMIA
OAD11	------- B
OAD12	------- X
OAD13	------- 4
OAD14	------- 2
OAD15	------- X
OB	-------- BACTERIAL INHIBITION SEMI-AUTOMATED
OBA1	------ PKU
OBA11	------- B
OBA12	------- X
OBA13	------- X
OBA14	------- X
OBA15	------- 1.2
OBB1	------ MSUD
OBB11	------- B
OBB12	------- X
OBB13	------- X
OBB14	------- X
OBB15	------- 1.2
OBC1	------ HOMOCYSTINURIA
OBC11	------- B
OBC12	------- X
OBC13	------- X
OBC14	------- X
OBC15	------- 1.2
OBD1	------ GALACTOSEMIA
OBD11	------- B
OBD12	------- X
OBD13	------- X
OBD14	------- X
OBD15	------- 1.2

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

OC	FLUOROMETRIC MANUAL
OCA1	PKU
OCA11	B
OCA12	120
OCA13	95
OCA14	10
OCA15	X
OCB1	MSUD
OCB11	B
OCB12	120
OCB13	95
OCB14	10
OCB15	X
OCC1	GALACTOSEMIA
OCC11	B
OCC12	120
OCC13	95
OCC14	10
OCC15	X
OD	FLUOROMETRIC AUTOMATED
ODA1	PKU
ODA11	B
ODA12	X
ODA13	X
ODA14	5
ODA15	0.5
ODB1	MSUD
ODB11	B
OBD12	X
OBD13	X
OBD14	5
OBD15	0.5
ODC1	GALACTOSEMIA
ODC11	B
ODC12	X
ODC13	X
ODC14	5
ODC15	0.5
OE	MISCELLANEOUS
OEA1	PAPER CHROMATOGRAPHY
OEA11	B
OEA12	X
OEA13	20
OEA14	X
OEA15	X
OEB1	PHENYLALANINE-BLOOD QUANTITATIVE FLUOROMETRIC MANUAL
OEB11	C
OEB12	60
OEB13	11
OEB14	X
OEB15	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

OEC1 ------	TYROSINE-BLOOD QUANTITATIVE FLUOROMETRIC MANUAL
OEC11-------	C
OEC12-------	60
OEC13-------	11
OEC14-------	10
OEC15-------	X
OED1 ------	HISTIDINE BLOOD QUANTITATIVE FLUOROMETRIC (MANUAL)
OED11-------	C
OED12-------	60
OED13-------	11
OED14-------	10
OED15-------	X
OEE1 ------	RIA T4
OEE11-------	C
OEE12-------	X
OEE13-------	X
OEE14-------	X
OEE15-------	1.2
OEF1 ------	RIA TSH
OEF11-------	D
OEF12-------	X
OEF13-------	X
OEF14-------	X
OEF15-------	1.4
OEG1 ------	AMINO ACID ANALYSIS
OEG11-------	C
OEG12-------	53
OEG13-------	43
OEG14-------	X
OEG15-------	X
OF___ -----	AMINO ACID CHROMATOGRAPHIC SEMI-QUANTITATIVE SCREENING
OFA1 ------	PROLINE
OFA11-------	C
OFA12-------	45
OFA13-------	11
OFA14-------	3
OFA15-------	X
OFB1 ------	NINHYDRIN (BLOOD AND SERUM)
OFB11-------	C
OFB12-------	45
OFB13-------	11
OFB14-------	3
OFB15-------	X
OFC1 ------	NINHYDRIN (URINE)
OFC11-------	C
OFC12-------	45
OFC13-------	11
OFC14-------	3
OFC15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd
P____----PESTICIDES

PA___-----	EXTRACTION AND PREPARATION
PAA1_------	URINE
PAA11-------	B
PAA12-------	235
PAA13-------	75
PAA14-------	X
PAA15-------	X
PAB1_------	BLOOD
PAB11-------	B
PAB12-------	170
PAB13-------	50
PAB14-------	X
PAB15-------	X
PAC1_------	WATER
PAC11-------	B
PAC12-------	45
PAC13-------	25
PAC14-------	X
PAC15-------	X
PAD1_------	MILK
PAD11-------	B
PAD12-------	500
PAD13-------	165
PAD14-------	X
PAD15-------	X
PAE1_------	SOIL
PAE11-------	B
PAE12-------	360
PAE13-------	130
PAE14-------	X
PAE15-------	X
PAF1_------	TISSUE
PAF11-------	B
PAF12-------	465
PAF13-------	200
PAF14-------	X
PAF15-------	X
PAG1_------	VEGETATION
PAG11--------	B
PAG12--------	370
PAG13--------	125
PAG14-------	X
PAG15-------	X
PAH1_------	AIR
PAH11-------	B
PAH12-------	85
PAH13-------	40
PAH14-------	X
PAH15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

PAI1 ------	FORMULATIONS	
PAI11-------		B
PAI12-------		45
PAI13-------		27
PAI14-------		X
PAI15-------		X
PB -----	ANALYSIS	
PBA1 ------	URINE	
PBA11-------		C
PBA12-------		62
PBA13-------		40
PBA14-------		X
PBA15-------		X
PBB1 ------	BLOOD	
PBB11-------		C
PBB12-------		82
PBB13-------		50
PBB14-------		X
PBB15-------		X
PBC1 ------	WATER	
PBC11-------		C
PBC12-------		90
PBC13-------		60
PBC14-------		X
PBC15-------		X
PBD1 ------	MILK	
PBD11-------		C
PBD12-------		165
PBD13-------		135
PBD14-------		X
PBD15-------		X
PBE1 ------	SOIL	
PBE11-------		C
PBE12-------		165
PBE13-------		140
PBE14-------		X
PBE15-------		X
PBF1 ------	TISSUE	
PBF11-------		C
PBF12-------		165
PBF13-------		140
PBF14-------		X
PBF15-------		X
PBG1 ------	VEGETATION	
PBG11-------		C
PBG12-------		165
PBG13-------		140
PBG14-------		X
PBG15-------		X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

PBH1 ------	AIR
PBH11-------	C
PBH12-------	165
PBH13-------	140
PBH14-------	X
PBH15-------	X
PBI1 ------	FORMULATIONS
PBI11-------	C
PBI12-------	110
PBI13-------	110
PBI14-------	X
PBI15-------	X
PC -----INTERPRETATION	
PCA1 ------	URINE
PCA11-------	C
PCA12-------	15
PCA13-------	12
PCA14-------	X
PCA15-------	X
PCB1 ------	BLOOD
PCB11-------	C
PCB12-------	15
PCB13-------	12
PCB14-------	X
PCB15-------	X
PCC1 ------	WATER
PCC11-------	C
PCC12-------	17
PCC13-------	14
PCC14-------	X
PCC15-------	X
PCD1 ------	MILK
PCD11-------	C
PCD12-------	25
PCD13-------	21
PCD14-------	X
PCD15-------	X
PCE1 ------	SOIL
PCE11-------	C
PCE12-------	25
PCE13-------	21
PCE14-------	X
PCE15-------	X
PCF1 ------	TISSUE
PCF11-------	C
PCF12-------	25
PCF13-------	21
PCF14-------	X
PCF15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

PCG1 ------	VEGETATION
PCG11--------	C
PCG12-------	25
PCG13-------	21
PCG14-------	X
PCG15-------	X
PCH1 ------	AIR
PCH11-------	C
PCH12-------	22
PCH13-------	19
PCH14-------	X
PCH15-------	X
PCI1 ------	FORMULATIONS
PCI11-------	C
PCI12-------	18
PCI13-------	15
PCI14-------	X
PCI15-------	X
PD___ -----	CLEAN-UP
PDA1 ------	URINE
PDA11-------	A
PDA12-------	25
PDA13-------	13
PDA14-------	X
PDA15-------	X
PDB1 ------	BLOOD
PDB11-------	A
PDB12-------	22
PDB13-------	9
PDB14-------	X
PDB15-------	X
PDC1 ------	WATER
PDC11-------	A
PDC12-------	15
PDC13-------	13
PDC14-------	X
PDC15-------	X
PDD1 ------	MILK
PDD11-------	A
PDD12-------	55
PDD13-------	34
PDD14-------	X
PDD15-------	X
PDE1 ------	SOIL
PDE11-------	A
PDE12-------	52
PDE13-------	32
PDE14-------	X
PDE15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

PDF1 ------	TISSUE
PDF11-------	A
PDF12-------	60
PDF13-------	37
PDF14-------	X
PDF15-------	X
PDG1 ------	VEGETATION
PDG11-------	A
PDG12-------	55
PDG13-------	34
PDG14-------	X
PDG15-------	X
PDH1 ------	AIR
PDH11-------	A
PDH12-------	22
PDH13-------	15
PDH14-------	X
PDH15-------	X
PDI1 ------	FORMULATIONS
PDI11-------	A
PDI12-------	20
PDI13-------	11
PDI14-------	X
PDI15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd
Q____----RADIOLOGICAL HEALTH

QA____-----	RADIOLOGICAL HEALTH
QAA1_------	PREPARATION OF WATER SAMPLES
QAA11-------	A
QAA12-------	100
QAA13-------	80
QAA14-------	X
QAA15-------	X
QAB1_------	GROSS ALPHA AND BETA
QAB11-------	B
QAB12-------	45
QAB13-------	10
QAB14-------	10
QAB15-------	X
QAC1_------	GROSS ALPHA OR BETA
QAC11-------	B
QAC12-------	30
QAC13-------	8
QAC14-------	X
QAC15-------	X
QAD1_------	WATER, GAMMA SCAN
QAD11-------	C
QAD12-------	30
QAD13-------	20
QAD14-------	X
QAD15-------	X
QAE1_------	GAMMA ANALYSIS, MILK
QAE11-------	C
QAE12-------	30
QAE13-------	X
QAE14-------	X
QAE15-------	X
QAF1_------	I-131 (ANION-GAMMA)
QAF11-------	C
QAF12-------	210
QAF13-------	140
QAF14-------	120
QAF15-------	X
QAG1_------	RADIUM-226 PRECIPITATION
QAG11-------	C
QAG12-------	315
QAG13-------	180
QAG14-------	180
QAG15-------	X
QAH1_------	RADON EMANATION
QAH11-------	C
QAH12-------	420
QAH13-------	220
QAH14-------	220
QAH15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

QAI1	STRONTIUM 89,90
QAI11	C
QAI12	720
QAI13	360
QAI14	X
QAI15	X
QAJ1	STRONTIUM 90 (WATER)
QAJ11	C
QAJ12	X
QAJ13	90
QAJ14	X
QAJ15	X
QAK1	STRONTIUM 90 (MILK)
QAK11	C
QAK12	X
QAK13	96
QAK14	X
QAK15	X
QAL1	TRITIUM (WASTE WATER)
QAL11	C
QAL12	74
QAL13	X
QAL14	X
QAL15	X
QAM1	TRITIUM (DRINKING WATER)
QAM11	C
QAM12	X
QAM13	40
QAM14	X
QAM15	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd
R____----AIR POLLUTION

RA__ -----	AIR POLLUTION
RAA1_ -----	SULFATION DISC
RAA11-------	B
RAA12-------	15
RAA13-------	12
RAA14-------	10
RAA15-------	10
RAB1_ ------	DETERMINATION OF PARTICULATE SULFATES AS PER HIGH VOLUME AIR SAMPLER FILTER
RAB11-------	C
RAB12-------	X
RAB13-------	24
RAB14-------	X
RAB15-------	X
RAC1_ ------	DETERMINATION OF TOTAL SUSPENDED PARTICULATES IN AMBIENT AIR SURROUNDINGS
RAC11-------	B
RAC12-------	X
RAC13-------	20
RAC14-------	X
RAC15-------	X
RAD1_ ------	TOTAL DUST (AIR FILTERS)
RAD11-------	B
RAD12-------	X
RAD13-------	X
RAD14-------	20
RAD15-------	X
RAE1_ ------	HYDROCARBON EXTRACTION SURFUR DIOXIDE
RAE11-------	C
RAE12-------	X
RAE13-------	17
RAE14-------	6
RAE15-------	6
RAF1_ ------	SULFUR DIOXIDE BUBBLERS
RAF11-------	C
RAF12-------	X
RAF13-------	20
RAF14-------	X
RAF15-------	X
RAG1_ ------	NITROGEN DIOXIDE BUBBLERS
RAG11-------	C
RAG12-------	X
RAG13-------	20
RAG14-------	X
RAG15-------	X
RAH1_ ------	NITROGEN DIOXIDE
RAH11-------	C
RAH12-------	X
RAH13-------	17
RAH14-------	6
RAH15-------	6

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

RAI1 ------	DETERMINATION OF AMBIENT AIR LEVELS (NITROGEN DIOXIDE)
RAI11-------	C
RAI12-------	X
RAI13-------	60
RAI14-------	X
RAI15-------	X
RAJ1 ------	DETERMINATION OF NON-METALS FLUORIDE FOLIAGE
RAJ11-------	C
RAJ12-------	90
RAJ13-------	45
RAJ14-------	45
RAJ15-------	X
RAK1 ------	DETERMINATION OF NON-METALS SULPHATES
RAK11-------	C
RAK12-------	20
RAK13-------	15
RAK14-------	15
RAK15-------	X
RAL1 ------	DETERMINATION OF NON-METALS PHOSPHATES
RAL11-------	C
RAL12-------	20
RAL13-------	15
RAL14-------	15
RAL15-------	X
RAM1 ------	DETERMINATION OF NON-METALS BENZENE EXTRACTIBLES
RAM11-------	C
RAM12-------	12
RAM13-------	12
RAM14-------	12
RAM15-------	X
RAN1 ------	DETERMINATION OF NON-METALS OXIDANTS
RAN11-------	C
RAN12-------	12
RAN13-------	10
RAN14-------	10
RAN15-------	X
RAO1 ------	DETERMINATION OF NON-METALS OXIDES OF NITROGEN
RAO11-------	C
RAO12-------	12
RAO13-------	10
RAO14-------	10
RAO15-------	X
RAP1 ------	AIR FILTER (INORGANICS)
RAP11-------	C
RAP12-------	X
RAP13-------	X
RAP14-------	10
RAP15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

RAQ1 ------	AIR FILTER (CARCINOGENS)
RAQ11------	C
RAQ12------	X
RAQ13------	X
RAQ14------	60
RAQ15------	X
RAR1 ------	MEASUREMENT OR % SULFUR BY WEIGHT IN RESIDUAL OIL
RAR11------	C
RAR12------	X
RAR13------	23
RAR14------	X
RAR15------	X
RAS1 ------	MICROSCOPIC IDENTIFICATION
RAS11------	B
RAS12------	20
RAS13------	20
RAS14------	X
RAS15------	X
RAT1 ------	MICROSCOPIC PARTICLE SIZE DETERMINATION
RAT11------	B
RAT12------	40
RAT13------	X
RAT14------	X
RAT15------	X
RB -----	CONTINUOUS REAL TIME AIR MONITORING
RBA1 ------	WIND VANE
RBA11------	B
RBA12------	1
RBA13------	X
RBA14------	X
RBA15------	X
RBB1 ------	THERMOCOUPLE (DEGREES F)
RBB11------	B
RBB12------	1
RBB13------	X
RBB14------	X
RBB15------	X
RBC1 ------	HYGROMETER (%)
RBC11------	B
RBC12------	1
RBC13------	X
RBC14------	X
RBC15------	X
RBD1 ------	ANEROID BAROMETER
RBD11------	B
RBD12------	1
RBD13------	X
RBD14------	X
RBD15------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

RBE1 ------	EPPLEY PYRANOMETER
RBE11-------	B
RBE12-------	1
RBE13-------	X
RBE14-------	X
RBE15-------	X
RBF1 ------	PERCENT TRANSMISSION
RBF11-------	B
RBF12-------	1
RBF13-------	X
RBF14-------	X
RBF15-------	X
RBG1 ------	PULSED FLUORESCENCE
RBG11-------	C
RBG12-------	20
RBG13-------	X
RBG14-------	X
RBG15-------	X
RBH1 ------	COULOMETRY
RBH11-------	C
RBH12-------	20
RBH13-------	X
RBH14-------	X
RBH15-------	X
RBI1 ------	CHEMILUMINESCENCE
RBI11-------	C
RBI12-------	1
RBI13-------	X
RBI14-------	X
RBI15-------	X
RBJ1 ------	NON-DISPERSIVE INFRA-RED
RBJ11-------	C
RBJ12-------	10
RBJ13-------	X
RBJ14-------	X
RBJ15-------	X
RBK1 ------	CHEMILUMINESCENCE (OXIDES OF NITROGEN)
RBK11-------	C
RBK12-------	7300
RBK13-------	X
RBK14-------	X
RBK15-------	X
RBL1 ------	CUP ANEMOMETER
RBL11-------	B
RBL12-------	1
RBL13-------	X
RBL14-------	X
RBL15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

S____	----TOXICOLOGY
SA___	----- FORENSIC AND OTHER
SAA1_	------ BARBITURATES QUALITATIVE
SAA11	------- C
SAA12	------- 40
SAA13	------- 30
SAA14	------- 30
SAA15	------- X
SAA2_	----- BARBITURATES G.C.
SAA21	------- C
SAA22	------- 90
SAA23	------- 60
SAA24	------- 60
SAA25	------- X
SAB1_	------ BARBITURATES QUANTITATIVE (UV)
SAB11	------- C
SAB12	------- 45
SAB13	------- 30
SAB14	------- 30
SAB15	-------- X
SAB2_	------ BERYLLIUM
SAB21	------- E
SAB22	------- X
SAB23	------- 120
SAB24	------- X
SAB25	------- X
SAC1_	------ BLOOD (CARBON MONOXIDE) (A) - GAS CHROMATOGRAPHIC
SAC11	------- C
SAC12	------- X
SAC13	------- 10
SAC14	------- X
SAC15	------- X
SAC2_	------ BLOOD (CARBON MONOXIDE) (B) - CO-OXIMETER
SAC21	------ C
SAC22	------- 15
SAC23	------- 10
SAC24	------- 10
SAC25	------- X
SAC3_	------ BLOOD (CARBON MONOXIDE) (C) - VAN SLYKE'S TECHNIQUE
SAC31	------- B
SAC32	------- 180
SAC33	------- 120
SAC34	------- 60
SAC35	------- X
SAD1_	------ BROMIDE
SAD11	------- C
SAD12	------- 60
SAD13	------- 45
SAD14	------- 15
SAD15	------- X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

SAD2 ------	COPPER (BLOOD, URINE)
SAD21-------	D
SAD22-------	X
SAD23-------	2
SAD24-------	X
SAD25-------	X
SAE1 ------	CYANIDE (A) - SEE WTU MANUAL
SAE11-------	C
SAE12-------	125
SAE13-------	95
SAE14-------	X
SAE15-------	X
SAE2 ------	CYANIDE (B) - SEE WTU MANUAL
SAE21-------	D
SAE22-------	X
SAE23-------	100
SAE24-------	X
SAE25-------	X
SAE3 ------	CYANIDE (C) - SEE WTU MANUAL
SAE31-------	C
SAE32-------	30
SAE33-------	20
SAE34-------	X
SAE35-------	X
SAE4 ------	CYANIDE (D) - SEE WTU MANUAL
SAE41-------	C
SAE42-------	30
SAE43-------	20
SAE44-------	X
SAE45-------	X
SAF1 ------	DRUG SCREEN (GLC)
SAF11--------	C
SAF12-------	80
SAF13-------	50
SAF14-------	45
SAF15-------	X
SAF2 ------	DRUG SCREEN (TLC)
SAF21-------	C
SAF22-------	70
SAF23-------	50
SAF24-------	40
SAF25-------	X
SAG1 ------	DRUG SCREEN (UV)
SAG11-------	C
SAG12-------	30
SAG13-------	30
SAG14-------	30
SAG15-------	X
SAG2 ------	ERYTHROCYTE PROTOPORPHYRIN DETERMINATION EXTRACTION
SAG21-------	C
SAG22-------	40
SAG23-------	10
SAG24-------	5
SAG25-------	5

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

SAH1 ------	ERYTHROCYTE PROTOPORPHYRIN HEMATOFLUOROMETER
SAH11-------	C
SAH12-------	6
SAH13-------	6
SAH14-------	6
SAH15-------	6
SAH2 ------	ETHYL ALCOHOL OXIDATION METHOD (BLOOD & BREATH)
SAH21-------	C
SAH22-------	60
SAH23-------	40
SAH24-------	40
SAH25-------	X
SAI1 ------	ETHYL ALCOHOL GAS CHROMATOGRAPHY (BLOOD & BREATH)
SAI11-------	C
SAI12-------	45
SAI13-------	30
SAI14-------	30
SAI15-------	X
SAI2 ------	GC-HEAD SPACE (BLOOD & BREATH)
SAI21-------	C
SAI22-------	15
SAI23-------	10
SAI24-------	10
SAI25-------	X
SAJ1 ------	FLUORIDE
SAJ11-------	D
SAJ12-------	X
SAJ13-------	8
SAJ14-------	X
SAJ15-------	X
SAJ2 ------	LEAD (BLOOD, URINE, HAIR, NAILS, PAINT, TISSUES) (A) - SEE WTU MANUAL
SAJ21-------	D
SAJ22-------	35
SAJ23-------	18
SAJ24-------	10
SAJ25-------	X
SAJ3 ------	LEAD (BLOOD, URINE, HAIR, NAILS, PAINT, TISSUES) (B) - SEE WTU MANUAL
SAJ31-------	E
SAJ32-------	X
SAJ33-------	15
SAJ34-------	10
SAJ35-------	X
SAK1 ------	LEAD, MICRO PROCEDURE
SAK11-------	C
SAK12-------	40
SAK13-------	20
SAK14-------	20
SAK15-------	18
SAK2 ------	LEAD AND CADMIUM IN POTTERY
SAK21------	C
SAK22-------	15
SAK23-------	X
SAK24-------	X
SAK25-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

SAL1 ------	LITHIUM
SAL11-------	D
SAL12-------	X
SAL13-------	2
SAL14-------	X
SAL15-------	X
SAL2_------	MERCURY (BLOOD, URINE, HAIR, NAILS, TISSUES) (A) - SEE WTU MANUAL
SAL21-------	D
SAL22-------	X
SAL23-------	8
SAL24-------	X
SAL25-------	X
SAL3_------	MERCURY (BLOOD, URINE, HAIR, NAILS, TISSUES) (B) - SEE WTU MANUAL
SAL31-------	E
SAL32-------	X
SAL33-------	10
SAL34-------	X
SAL35-------	X
SAM1 ------	MOBAT
SAM11-------	B
SAM12-------	X
SAM13-------	15
SAM14-------	X
SAM15-------	X
SAM2 ------	MORPHINES (A) - SEE WTU MANUAL
SAM21-------	B
SAM22-------	X
SAM23-------	1
SAM24-------	1
SAM25-------	X
SAM3 ------	MORPHINES (B) - SEE WTU MANUAL
SAM31-------	B
SAM32-------	X
SAM33-------	X
SAM34-------	X
SAM35-------	1
SAN1 ------	MORPHINE SCAN (FLUOROMETRIC)
SAN11-------	C
SAN12-------	35
SAN13-------	22
SAN14-------	X
SAN15-------	X
SAN2 ------	NICKLE
SAN21-------	C
SAN22-------	X
SAN23-------	10
SAN24-------	X
SAN25-------	X
SAO1 ------	PALLADIUM CHLORIDE TEST (SCREEN)
SAO11-------	B
SAO12-------	10
SAO13-------	8
SAO14-------	6
SAO15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

SAO2 ------	SALICYLATE (TRINDERS)
SAO21-------	C
SAO22-------	12
SAO23-------	8
SAO24-------	X
SAO25-------	X
SAP1 ------	SELENIUM (A) - SEE WTU MANUAL
SAP11-------	D
SAP12-------	X
SAP13-------	8
SAP14-------	X
SAP15-------	X
SAP2 ------	SELENIUM (B) - SEE WTU MANUAL
SAP21-------	E
SAP22-------	X
SAP23-------	10
SAP24-------	X
SAP25-------	X
SAP3 ------	SPECTROPHOTOMETRIC DETERMINATION OF CARBOXYHEMOGLOBIN
SAP31-------	B
SAP32-------	19
SAP33-------	17
SAP34-------	15
SAP35-------	X
SAQ1 ------	STRYCHNINE (DICHROMATE)
SAQ11-------	C
SAQ12-------	10
SAQ13-------	10
SAQ14-------	X
SAQ15-------	X
SAQ2 ------	ZINC (BLOOD)
SAQ21-------	D
SAQ22-------	15
SAQ23-------	6
SAQ24-------	X
SAQ25-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd
T____----OCCUPATIONAL HYGIENE

TA___ -----	OCCUPATIONAL HYGIENE
TAA1_ ------	ACETIC ACID
TAA11-------	C
TAA12-------	45
TAA13-------	24
TAA14-------	X
TAA15-------	X
TAA2_ ------	ACIDS (HYDROCHLORIC, SULFURIC)
TAA21-------	C
TAA22-------	15
TAA23-------	8
TAA24-------	X
TAA25-------	X
TAB1_ ------	ALDEHYDES
TAB11------	C
TAB12-------	120
TAB13-------	48
TAB14-------	X
TAB15-------	X
TAB2_ ------	AMMONIA AND SALTS (A) - COLORIMETRIC
TAB21-------	C
TAB22-------	30
TAB23-------	20
TAB24-------	X
TAB25-------	X
TAB3_ ------	AMMONIA AND SALTS (B) - SPECIFIC ION
TAB31-------	C
TAB32-------	25
TAB33-------	15
TAB34-------	X
TAB35-------	X
TAB4_ ------	AMMONIA AND SALTS (C) - NESSLERIZATION
TAB41-------	C
TAB42-------	30
TAB43-------	20
TAB44-------	X
TAB45-------	X
TAC1_ ------	ARSENIC (URINE, BLOOD, NAILS, TISSUE, HAIR) (A) - SEE WTU MANUAL
TAC11-------	D
TAC12-------	100
TAC13-------	45
TAC14-------	35
TAC15-------	X
TAC2_ ------	ARSENIC (URINE, BLOOD, NAILS, TISSUE, HAIR) (B) - SEE WTU MANUAL
TAC21-------	E
TAC22-------	100
TAC23-------	45
TAC24-------	35
TAC25-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

TAD1 ------	ARSENIC (DUST, AIR) (A) - SEE WTU MANUAL
TAD11-------	D
TAD12-------	X
TAD13-------	T
TAD14-------	30
TAD15-------	X
TAD2 ------	ARSENIC (DUST, AIR) (B) - SEE WTU MANUAL
TAD21-------	E
TAD22-------	X
TAD23-------	X
TAD24-------	30
TAD25-------	X
TAD3 ------	ASBESTOS (DUST OR BULK)
TAD31------	C
TAD32-------	45
TAD33-------	40
TAD34-------	X
TAD35-------	X
TAE1 ------	BARIUM (AIR)
TAE11-------	D
TAE12-------	90
TAE13-------	45
TAE14-------	15
TAE15-------	X
TAE2 ------	BENZENE SOLUBLE COAL TAR PITCH VOLATILES
TAE21-------	C
TAE22-------	45
TAE23-------	30
TAE24-------	X
TAE25-------	X
TAF1 ------	BERYLLIUM (AIR, URINE) (A) - SEE WTU MANUAL
TAF11-------	D
TAF12-------	X
TAF13-------	X
TAF14-------	35
TAF15-------	X
TAF2 ------	BERYLLIUM (AIR, URINE) (B) - SEE WTU MANUAL
TAF21-------	D
TAF22-------	X
TAF23-------	X
TAF24-------	20
TAF25-------	X
TAF3 ------	CADIUM (AIR, BLOOD, URINE, NAILS)
TAF31-------	D
TAF32-------	20
TAF33-------	12
TAF34-------	10
TAF35-------	X
TAG1 ------	CALCIUM OXIDE HYDRATION (DUST)
TAG11-------	B
TAG12-------	15
TAG13-------	10
TAG14-------	4
TAG15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

TAG2 ------	CHLORINE, FREE (AIR)
TAG21-------	C
TAG22-------	25
TAG23-------	15
TAG24-------	10
TAG25-------	X
TAH1 ------	CHROMIC ACID (AIR)
TAH11-------	C
TAH12-------	20
TAH13-------	8
TAH14-------	X
TAH15-------	X
TAH2 ------	COPPER (AIR, URINE, BLOOD)
TAH21-------	D
TAH22-------	15
TAH23-------	10
TAH24-------	10
TAH25-------	X
TAI1 ------	CYANIDE
TAI11-------	D
TAI12-------	140
TAI13-------	100
TAI14-------	X
TAI15-------	X
TAI2 ------	DUST AND FIBER WEIGHTS
TAI21-------	A
TAI22-------	6
TAI23-------	4
TAI24-------	4
TAI25-------	X
TAJ1 ------	DUST COUNT
TAJ11-------	B
TAJ12-------	40
TAJ13-------	X
TAJ14-------	X
TAJ15-------	X
TAJ2 ------	DUST PARTICLE SIZING
TAJ21-------	C
TAJ22-------	25
TAJ23-------	X
TAJ24-------	X
TAJ25-------	X
TAK1 ------	FLUORIDE AND HYDROGEN FLUORIDE
TAK11-------	C
TAK12-------	45
TAK13-------	25
TAK14-------	X
TAK15-------	X
TAK2 ------	FORMALDEHYDE
TAK21-------	C
TAK22-------	35
TAK23-------	20
TAK24-------	X
TAK25-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

TAL1 ------	HYDROGEN SULFIDE
TAL11-------	C
TAL12-------	35
TAL13-------	20
TAL14-------	X
TAL15-------	X
TAL2 ------	IRON (AIR)
TAL21-------	D
TAL22-------	15
TAL23-------	10
TAL24-------	X
TAL25-------	X
TAM1 ------	LEAD (AIR)
TAM11-------	D
TAM12-------	15
TAM13-------	10
TAM14-------	10
TAM15-------	X
TAM2 ------	LEAD (DUST, BLOOD, URINE, NAILS, TISSUES) (A) - SEE WTU MANUAL
TAM21-------	D
TAM22-------	15
TAM23-------	10
TAM24-------	10
TAM25-------	X
TAM3 ------	LEAD (DUST, BLOOD, URINE, NAILS, TISSUES) (B) - SEE WTU MANUAL
TAM31-------	E
TAM32-------	15
TAM33-------	10
TAM34-------	10
TAM35-------	X
TAN1 ------	LITHIUM (BLOOD)
TAN11-------	D
TAN12-------	15
TAN13-------	10
TAN14-------	X
TAN15-------	X
TAN2 ------	MAGNESIUM (AIR)
TAN21-------	D
TAN22-------	15
TAN23-------	10
TAN24-------	X
TAN25-------	X
TAO1 ------	MANGANESE (AIR)
TAO11-------	D
TAO12-------	15
TAO13-------	10
TAO14-------	X
TAO15-------	X
TAO2 ------	MERCURY (AIR)
TAO21-------	E
TAO22-------	20
TAO23-------	10
TAO24-------	X
TAO25-------	X

TABLE B-19 Cont'd

WORK TIME UNIT CODES Cont'd

TAP1 ------	MERCURY (DUST, BLOOD, URINE, HAIR, NAILS, TISSUE)
TAP11-------	E
TAP12-------	20
TAP13-------	15
TAP14-------	15
TAP15-------	X
TAP2 ------	METHYLDIPHENYLISOCYANATE (MDI) (AIR)
TAP21-------	C
TAP22-------	60
TAP23-------	40
TAP24-------	40
TAP25-------	X
TAQ1 ------	NICKEL (AIR, BLOOD)
TAQ11------	D
TAQ12-------	15
TAQ13-------	10
TAQ14-------	10
TAQ15-------	X
TAQ2 ------	OIL (AIR)
TAQ21-------	C
TAQ22-------	30
TAQ23-------	20
TAQ24-------	X
TAQ25-------	X
TAR1 ------	OIL MIST
TAR11-------	C
TAR12-------	80
TAR13-------	50
TAR14-------	X
TAR15-------	X
TAR2 ------	ORGANIC SOLVENTS (A) - SEE WTU MANUAL
TAR21-------	D
TAR22-------	70
TAR23-------	50
TAR24-------	X
TAR25-------	X
TAR6 ------	ORGANIC SOLVENTS (B) - SEE WTU MANUAL
TAR61------	D
TAR62-------	30
TAR63-------	30
TAR64-------	X
TAR65-------	X
TAS1 ------	OZONE
TAS11-------	C
TAS12-------	45
TAS13-------	25
TAS14-------	X
TAS15-------	X
TAS2 ------	PHENOL
TAS21-------	D
TAS22-------	90
TAS23-------	40
TAS24-------	X
TAS25-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

TAT1 ------	PHOSPHORIC ACID (AIR) (A) - SEE WTU MANUAL
TAT11-------	C
TAT12-------	X
TAT13-------	20
TAT14-------	18
TAT15-------	X
TAT2 ------	PHOSPHORIC ACID (AIR) (B) - SEE WTU MANUAL
TAT21-------	C
TAT22-------	X
TAT23-------	X
TAT24-------	18
TAT25-------	X
TAT3 ------	SELENIUM (URINE)
TAT31-------	E
TAT32-------	150
TAT33-------	30
TAT34-------	X
TAT35-------	X
TAU1 ------	SILICA (A) - SEE WTU MANUAL
TAU11-------	C
TAU12-------	60
TAU13-------	60
TAU14-------	X
TAU15-------	X
TAU2 ------	SILICA (B) - SEE WTU MANUAL
TAU21-------	C
TAU22-------	70
TAU23-------	40
TAU24-------	X
TAU25-------	X
TAU3 ------	SILICA (FREE AIR)
TAU31-------	C
TAU32-------	45
TAU33-------	20
TAU34-------	X
TAU35-------	X
TAV1 ------	SILVER (AIR)
TAV11-------	D
TAV12-------	15
TAV13-------	10
TAV14-------	X
TAV15-------	X
TAV2 ------	SODIUM (AIR)
TAV21-------	D
TAV22-------	15
TAV23-------	10
TAV24-------	X
TAV25-------	X
TAW1 ------	SODIUM HYDROXIDE (AIR) (A) - SEE WTU MANUAL
TAW11-------	C
TAW12-------	X
TAW13-------	6
TAW14-------	X
TAW15-------	X

TABLE B-19 Cont'd
WORK TIME UNIT CODES Cont'd

TAW2 ------	SODIUM HYDROXIDE (AIR) (B) - SEE WTU MANUAL
TAW21-------	D
TAW22-------	15
TAW23-------	10
TAW24-------	X
TAW25-------	X
TAW3 ------	TOLUENE DIISOCYANATE (TDI) (AIR)
TAW31------	D
TAW32-------	60
TAW33------	40
TAW34-------	X
TAW35-------	X
TAX1 ------	THALLIM (URINE)
TAX11------	D
TAX12-------	30
TAX13-------	20
TAX14-------	X
TAX15-------	X
TAX2 ------	TOTAL DISSOLVED RESIDUE
TAX21------	B
TAX22-------	18
TAX23-------	15
TAX24-------	X
TAX25-------	X
TAY1 ------	ZINC (AIR, BLOOD, URINE)
TAY11------	D
TAY12-------	15
TAY13-------	6
TAY14-------	X
TAY15-------	X

TABLE B-20

LABORATORIAN IDENTIFICATION FILE

Item No.	Alphanumeric Code*	File Item Name
1	NNNNAA	Laboratorian Identification (Including Laboratory Subarea)
2	AAAAA AAAAA AAAAA AAAAA AAAAA	Laboratorian Name

*A = alphabetic
*N = numeric

Permanent 15,500 characters

TABLE B-21

PROGRAM NAME FILE

Item No.	Alphanumeric Code*	File Item Name
1	NN	Program Code (developed by user)
2	AAAAA AAAAA	Program Name

*A = alphabetic
*N = numeric

Permanent 1,200 characters

TABLE B-22

UNSATISFACTORY SPECIMEN FILE

Item No.	Alphanumeric Code*	File Item Name
1	NNN	Unsatisfactory Specimen Code
2	NNNN	Sum of Unsatisfactory Specimens by Code
		UNSATISFACTORY SPECIMENS
100		Broken/leaked in transit
101		Laboratory accident
102		Test unsatisfactory (laboratory difficulty)
103		Quantity not sufficient
104		Test not done at this laboratory
105		Insufficient data on submittal form
106		Inadvertently refrigerated
107		Too old
108		Specimen/sample submitted in wrong collection outfit
109		Confluent growth
110		No growth
111		Growth inhibitor added
112		Contaminated
113		Not frozen
114		Frozen
115		Inadequate preservative
116		Preservative used (makes results unreliable)
117		No preservative used
118		Too viscous for pipetting
119		Hemolyzed
120		No clot
121		Precipitate formed on heating
122		No separation of serum from clot
123		Anticomplementary
124		Excessive blood
125		Serum or clotted blood received (preserved blood required)
126		Formalinized specimen
127		Specimen over 24 hours old
128		Specimen over 72 hours old
129		Specimen over 5 days old
130		Smear unsatisfactory (send culture)
131		Urine in specimen (no exam)
132		Turbid
133		Chylous
134		Lipemic
135		Icteric
136		Patient not fasting
137		Circle not filled with blood (send second specimen)

TABLE B-22 Cont'd

138	Baby less than 3 days old (send second specimen)
139	Spot damaged (send second specimen)
140	Feeding less than 24 hours
141	Brain destroyed when animal killed
142	Brain decomposed
143	Too numerous to count
144	Contained residual chlorine
145	Unauthorized collector
146	Particulate matter
147	Cellular evidence of drying
148	Reparative changes
149	Tick dead on arrival
150	Other

*A = alphabetic
*N = numeric

Number of characters annually: 300

TABLE B-23

LABORATORY REFERENCE FILE

Item No.	Alphanumeric Code*	File Item Name
1	NN	Code for Type Laboratory (developed by user)
2	AAAAA AAAAA AAAAA AAAAA AAAAA	Name of Laboratory
3	NNN	Test Code (see table B-11)
4	NNNNNN	Sum of Tests by Test Code by Type of Laboratory

*A = alphabetic
*N = numeric

Number of characters annually: 12,300

TABLE B-24

EPIDEMIOLOGY FILE

Item No.	Alphanumeric Code*	File Item Name
1	NNNNNNAAAA	Accession Number
2	NNNNNN	Date Collected
3	AA	Laboratory Subarea
4	NNNNNN	Date of Onset
5	NNNNNN	Date Received
6	NNN	Test Requested
7	NNN	Test Results
8	AAA (Country Code)	Place of Foreign Travel
9	NNNN	Month/Year of Foreign Travel
10	AA (State Code)	Place of Domestic Travel
11	NNNN	Month/Year of Domestic Travel
12	AAAAA AAAAA AAAAA	Agent Other Than Salmonella or Shigella
13	A	Patient Polio Immunization
14	A	Family Polio Immunization
15	AAAAA AAAAA AAAAA	Type of Other Patient Immunization
16	AAAAA AAAAA AAAAA	Type of Other Family Immunization
17	A	Human Exposure

*A = alphabetic
*N = numeric

Weekly 97 characters per file

Annually 485,000 characters per file

TABLE B-25

REFERRED SPECIMEN FILE

Item No.	Alphanumeric Code*	File Item Name
1	NNNNNNAAAA	Accession Number
2	NNN	Test Request Code (see table B-11)
3	AAAAA AAAAA AAAAA AAAAA AAAAA	Patient Name
4	NNNNNN	Patient Date of Birth
5	NNNNNNNNNA	Submitter Identification
6	NNNNNN	Date Specimen Referred Outside Laboratory
7	NN	Code of Laboratory Where Specimen Referred (Type Laboratory see table B-23)
8	NNNNNN	Date Referred Specimen Results Returned to SPHL
9	NNN	Referred Specimen Results Code (see table B-27)
10	NNNNNN	Date Referred Specimen Results Reported to Submitter

*A = alphabetic
*N = numeric

Weekly 77 characters per file

Annually 385,000 characters

(This file must be built)

TABLE B-26

STATE FILE

Item No.	Alphanumeric Code*	File Item Name
1	AA	State Code
2	AAAAA AAAAA AAAAA AAAAA	State Name

STATE CODE

Code	Title
10	ALABAMA
11	ALASKA
12	ARIZONA
13	ARKANSAS
14	CALIFORNIA
15	COLORADO
16	CONNECTICUT
17	DELAWARE
18	FLORIDA
19	GEORGIA
20	HAWAII
21	IDAHO
22	ILLINOIS
23	INDIANA
24	IOWA
25	KANSAS
26	KENTUCKY
27	LOUISIANA
28	MAINE
29	MARYLAND
30	MASSACHUSETTS
31	MICHIGAN
32	MINNESOTA
33	MISSISSIPPI
34	MISSOURI
35	MONTANA
36	NEBRASKA
37	NEVADA
38	NEW HAMPSHIRE
39	NEW JERSEY
40	NEW MEXICO
41	NEW YORK
42	NORTH CAROLINA
43	NORTH DAKOTA

TABLE B-26 (Cont'd)

44	OHIO
45	OKLAHOMA
46	OREGON
47	PENNSYLVANIA
48	RHODE ISLAND
49	SOUTH CAROLINA
50	SOUTH DAKOTA
51	TENNESSEE
52	TEXAS
53	UTAH
54	VERMONT
55	VIRGINIA
56	WASHINGTON
57	WEST VIRGINIA
58	WISCONSIN
59	WYOMING
60	DISTRICT OF COLUMBIA

*A = alphabetic
*N = numeric

Permanent 1100 characters

TABLE B-27

TEST RESULT FILE

Item No.	Alphanumeric Code*	File Item Name
1	NNN	Test Result Code
2	125 Alphanumeric	Test Result Name

TEST RESULT CODE

100	DIPHTHERIA NOT FOUND
101	DIPHTHERIA FOUND NOT TOXIGENIC
102	DIPHTHERIA FOUND TOXIGENIC
103	STREPTOCOCCUS GP/A NOT FOUND
104	STREPTOCOCCUS GP/A FOUND
105	STAPHYLOCOCCI COAGULASE POS NOT FOUND
106	STAPHYLOCOCCI COAGULASE POS FOUND
107	B PERTUSSIS CULTURE NEG
108	B PERTUSSIS CULTURE POS
109	B PERTUSSIS FA NEG
110	B PERTUSSIS FA POS
111	B PARAPERTUSSIS NOT FOUND
112	B PARAPERTUSSIS FOUND
113	OTHER NASOPHARYNGEAL NOT FOUND
114	OTHER NASOPHARYNGEAL FOUND
115	NEISSERIA MENINGITIDIS SEROGROUP___
116	KLEBSIELLA TYPE___
117	H INFLUENZAE TYPE___
118	LISTERIA
119	VIBRIO_____
120	STAPHYLOCOCCI TYPE___,___,___,___,___
121	OTHER SEROGROUPING/SEROTYPING_____
122	ZIEHL-NEELSEN NO AFB OBSERVED
123	ZIEHL-NEELSEN AFB OBSERVED
124	FLUOROCHROME NEGATIVE
125	FLUOROCHROME POSITIVE
126	M TUBERCULOSIS
127	M BOVIS
128	OTHER SLOW GROWING
129	M. KANSASII
130	M MARINUM
131	M SIMIAE
132	M ASIATICUM
133	OTHER PHOTOCHROMOGENS_____
134	M SCROFULACEUM
135	M SZULGAI
136	M XENOPI

TABLE B-27 (Cont'd)

137 M GORDONAE
138 M FLAVESCENS
139 OTHER SCOTOCHROMOGENS_____
140 M AVIUM
141 M TERRAE
142 M GASTRI
143 M TRIVIALE
144 M MALMOENSE
145 M HAEMOPHILUM
146 OTHER NONPHOTOCHROMOGENS_____
147 M FORTUITUM
148 M CHELONEI
149 OTHER RAPID GROWING
150 STRICTLY PATHOGENIC
151 POTENTIALLY PATHOGENIC
152 PROBABLY NONPATHOGENIC
153 RARELY PATHOGENIC
154 DRUG SUSCEPTIBILITY TEST DIRECT
155 DRUG SUSCEPTIBILITY TEST INDIRECT
156 CONTROL_____ DILUTION COLONY COUNT 10___ DILUTION % RESISTANT___
157 CAPREOMYCIN 10.0 DILUTION COLONY COUNT 10___ DILUTION % RESISTANT___
158 STREPTOMYCIN 2.0 DILUTION COLONY COUNT 10___ DILUTION % RESISTANT___
159 STREPTOMYCIN 10.0 DILUTION COLONY COUNT 10___ DILUTION % RESISTANT___
160 ISONIAZID 0.2 DILUTION COLONY COUNT 10___ DILUTION % RESISTANT___
161 ISONIAZID 1.0 DILUTION COLONY COUNT 10___ DILUTION % RESISTANT___
162 ISONIAZID 5.0 DILUTION COLONY COUNT 10___ DILUTION % RESISTANT___
163 PARA AMINOSALICYLIC A 2.0 DILUTION COLONY COUNT 10___ DILUTION % RESISTANT___
164 RIFAMPIN 1.0 DILUTION COLONY COUNT 10___ DILUTION % RESISTANT___
165 ETHIONAMIDE 5.0 DILUTION COLONY COUNT 10___ DILUTION % RESISTANT___
166 KANAMYCIN 5.0 DILUTION COLONY COUNT 10___ DILUTION % RESISTANT___
167 PYRAZINAMIDE 50.0 DILUTION COLONY COUNT 10___ DILUTION % RESISTANT___
168 D-CYCLOSERINE 30.0 DILUTION COLONY COUNT 10___ DILUTION % ___
169 ETHAMBUTOL 5.0 DILUTION COLONY COUNT 10___ DILUTION %
170 OTHER TB DRUG SUSCEPTIBILITY TEST_____ DILUTION COLONY COUNT 10___ DILUTION % RESISTANT___
171 NO ENTERIC PATHOGENS FOUND
172 S TYPHIMURIUM
173 S HEIDELBERG
174 S ENTERITIDIS

TABLE B-27 (Cont'd)

175	S NEWPORT
176	S INFANTIS
177	S AGONA
178	S MONTEVIDEO
179	S TYPHI (PHAGE) //////
180	S SAINT PAUL
181	S JAVIANA
182	S OTHER_____
183	ARIZONA HINSHAWII
184	GP A DYSENTERIAE SEROTYPE___
185	GP B FLEXNERI SEROTYPE___
186	GP C BOYDII SEROTYPE___
187	GP D SONNEI SEROTYPE___
188	EE COLI_____
189	CAMPYLOBACTER SUBSPECIES_____
190	OTHER ENTERIC_____
191	GRAM NEG DIPLOCOCCI NOT FOUND
192	GRAM NEG DIPLOCOCCI FOUND INTRACELLULAR
193	GRAM NEG DIPLOCOCCI FOUND EXTRACELLULAR
194	TRICHOMONAS NOT FOUND
195	TRICHOMONAS FOUND
196	CANDIDA (MONILIA) NOT FOUND
197	CANDIDA (MONILIA) FOUND
198	N GONORRHOEAE NOT FOUND
199	N GONORRHOEAE FOUND
200	N MENINGITIDIS NOT FOUND
201	N MENINGITIDIS FOUND
202	PPNG NOT FOUND
203	PPNG FOUND
204	GC OTHER NOT FOUND
205	GC OTHER FOUND_____
206	NO MISCELLANEOUS BACTERIOLOGY ORGANISM ISOLATED
207	MISCELLANEOUS BACTERIOLOGY ORGANISM ISOLATED_____
208	CULTURE RESULTS NEGATIVE
209	CANDIDA ALBICANS
210	CANDIDA TROPICALIS
211	CANDIDA PARAPSILOSIS
212	CANDIDA KRUSEI
213	CANDIDA OTHER_____
214	TORULOPSIS GLABRATA
215	CRYPTOCOCCUS NEOFORMANS
216	TRICHOSPORON BEIGELII
217	ASPERGILLUS FLAVUS
218	ASPERGILLUS FUMIGATUS
219	ASPERGILLUS NIGER
220	ASPERGILLUS OTHER_____
221	EXOPHIALA JEANSELMEI
222	WANGIELLA DERMATITIDIS
223	PENICILLIUM
224	CLADOSPORIUM
225	BLASTOMYCES DERMATITIDIS
226	COCCIDIOIDES IMMITIS
227	HISTOPLASMA CAPSULATUM

TABLE B-27 (Cont'd)

228	SPOROTHRIX SCHENCKII
229	NOCARDIA ASTEROIDES
230	NOCARDIA OTHER
231	ACTINOMADURA MADURAE
232	STREPTOMYCES
233	TRICHOPHYTON RUBRUM
234	TRICHOPHYTON TONSURANS
235	TRICHOPHYTON OTHER
236	MICROSPORUM CANIS
237	MICROSPORUM OTHER
238	MYCOLOGY OTHER
239	NO PARASITIC FORMS FOUND
240	ARTHROPOD IDENTIFIED (SP)
241	DIENTAMOEBA FRAGILIS TROPHS
242	DIENTAMOEBA FRAGILIS CYSTS
243	ENDOLIMAX NANA TROPHS
244	ENDOLIMAX NANA CYSTS
245	ENTAMOEBA COLI TROPHS
246	ENTAMOEBA COLI CYSTS
247	ENTAMOEBA HARTMANNI TROPHS
248	ENTAMOEBA HARTMANNI CYSTS
249	ENTAMOEBA HISTOLYTICA TROPHS
250	ENTAMOEBA HISTOLYTICA CYSTS
251	IODAMOEBA BUTSCHLII TROPHS
252	IODAMOEBA BUTSCHLII CYSTS
253	CHILOMASTIX MESNILI TROPHS
254	CHILOMASTIX MESNILI CYSTS
255	GIARDIA LAMBLIA TROPHS
256	GIARDIA LAMBLIA CYSTS
257	OTHER PROTOZOA TROPHS
258	OTHER PROTOZOA CYSTS
259	ASCARIS LUMBRICOIDES EGGS
260	ASCARIS LUMBRICOIDES LARV
261	ASCARIS LUMBRICOIDES ADULT
262	ENTEROBIUS VERMICULARIS EGGS
263	ENTEROBIUS VERMICULARIS LARV
264	ENTEROBIUS VERMICULARIS ADULT
265	HOOKWORM (SP) EGGS
266	HOOKWORM (SP) LARV
267	HOOKWORM (SP) ADULT
268	STRONGYLOIDES STERCORALIS EGGS
269	STRONGYLOIDES STERCORALIS LARV
270	STRONGYLOIDES STERCORALIS ADULT
271	TRICHURIS TRICHIURA EGGS
272	TRICHURIS TRICHIURA LARV
273	TRICHURIS TRICHIURA ADULT
274	HYMENOLEPIS NANA EGGS
275	HYMENOLEPIS NANA LARV
276	HYMENOLEPIS NANA ADULT

TABLE B-27 (Cont'd)

277	CLONORCHIS SINENSIS EGGS___
278	CLONORCHIS SINENSIS LARV___
279	CLONORCHIS SINENSIS ADULT___
280	TAENIA SAGINATA EGGS___
281	TAENIA SAGINATA LARV___
282	TAENIA SAGINATA ADULT___
283	TAENIA SOLIUM EGGS___
284	TAENIA SOLIUM LARV___
285	TAENIA SOLIUM ADULT___
286	DIPHYLLOBOTHRIUM LATUM EGGS___
287	DIPHYLLOBOTHRIUM LATUM LARV___
288	DIPHYLLOBOTHRIUM LATUM ADULT___
289	SCHISTOSOMA MANSONI EGGS___
290	SCHISTOSOMA MANSONI LARV___
291	SCHISTOSOMA MANSONI ADULT___
292	SCHISTOSOMA JAPONICUM EGGS___
293	SCHISTOSOMA JAPONICUM LARV___
294	SCHISTOSOMA JAPONICUM ADULT___
295	PARAGONIMUS WESTERMANI EGGS___
296	PARAGONIMUS WESTERMANI LARV___
297	PARAGONIMUS WESTERMANI ADULT___
298	FASCIOLOPSIS BUSKI EGGS___
299	FASCIOLOPSIS BUSKI LARV___
300	FASCIOLOPSIS BUSKI ADULT___
301	OTHER PS HELMINTHS_____ EGGS___
302	OTHER PS HELMINTHS_____ LARV___
303	OTHER PS HELMINTHS_____ ADULT___
304	PLASMODIUM FALCIPARUM
305	PLASMODIUM OVALE
306	PLASMODIUM VIVAX
307	PLASMODIUM MALARIAE
308	OTHER BLOOD PARASITES FOUND_____
309	NO VIRUS DETECTED (DIRECT EXAM)
310	VIRUS DETECTED (DIRECT EXAM)_____
311	NO VIRUS ISOLATED (CULTURE)
312	PRESUMPTIVE ID (CULTURE)_____
313	VIRUS IDENTIFIED_____
314	FA NEGATIVE
315	FA POSITIVE
316	NO ANIMAL INOCULATION WILL BE DONE
317	ANIMAL INOCULATION REPORT TO FOLLOW
318	ANIMAL INOCULATION NEGATIVE
319	ANIMAL INOCULATION POSITIVE
320	VDRL NONREACTIVE
321	VDRL WEAKLY REACTIVE
322	VDRL REACTIVE
323	RPR NONREACTIVE
324	RPR WEAKLY REACTIVE
325	RPR REACTIVE

TABLE B-27 (Cont'd)

326	OTHER QUALITATIVE NON TP NONREACTIVE
327	OTHER QUALITATIVE NON TP WEAKLY REACTIVE
328	OTHER QUALITATIVE NON TP REACTIVE
329	VDRL____ QUANTITATIVE
330	RPR____ QUANTITATIVE
331	OTHER QUANTITATIVE NON TP____ (SP)_____
332	FTA/ABS NEGATIVE
333	FTA/ABS BORDERLINE
334	FTA/ABS REACTIVE
335	MHA/TP NEGATIVE
336	MHA/TP BORDERLINE
337	MHA/TP REACTIVE
338	OTHER TP NEGATIVE
339	OTHER TP BORDERLINE
340	OTHER TP NEGATIVE
341	DFATP NO SPIRAL ORGANISMS FOUND
342	DFATP NON FLUORESCENT SPIRAL ORGANISMS
343	DFATP FLUORESCENT SPIRAL ORGANISMS
344	DARKFIELD TP NOT SEEN
345	DARKFIELD TP SEEN
346	TOTAL PROTEIN___ MG%
347	ACUTE BRUCELLOSIS SLIDE NEGATIVE
348	ACUTE BRUCELLOSIS SLIDE POSITIVE____
349	ACUTE BRUCELLOSIS TUBE NEGATIVE
350	ACUTE BRUCELLOSIS TUBE TITER____
351	ACUTE TULAREMIA SLIDE NEGATIVE
352	ACUTE TULAREMIA SLIDE POSITIVE____
353	ACUTE TULAREMIA TUBE NEGATIVE
354	ACUTE TULAREMIA TUBE TITER____
355	ACUTE LEPTOSPIROSIS NEGATIVE
356	ACUTE LEPTOSPIROSIS FOUND_____
357	ACUTE LEGIONNAIRES NEGATIVE
358	ACUTE LEGIONNAIRES FOUND TITER___
359	ACUTE ASO NEGATIVE
360	ACUTE ASO FOUND TITER____
361	ACUTE CRP NEGATIVE
362	ACUTE CRP POSITIVE
363	ACUTE BF OTHER NEGATIVE___ (SP)_____
364	ACUTE BF OTHER POSITIVE___ (SP)_____
365	CONVAL BRUCELLOSIS SLIDE NEGATIVE
366	CONVAL BRUCELLOSIS SLIDE POSITIVE____
367	CONVAL BRUCELLOSIS TUBE NEGATIVE
368	CONVAL BRUCELLOSIS TUBE POSITIVE TITER____
369	CONVAL TULAREMIA SLIDE NEGATIVE
370	CONVAL TULAREMIA SLIDE POSITIVE____
371	CONVAL TULAREMIA TUBE NEGATIVE
372	CONVAL TULAREMIA TUBE POSITIVE TITER____
373	CONVAL LEPTOSPIROSIS NEGATIVE
374	CONVAL LEPTOSPIROSIS FOUND_____

TABLE B-27 (Cont'd)

375 CONVAL LEGIONNAIRES NEGATIVE
376 CONVAL LEGIONNAIRES FOUND TITER___
377 CONVAL ASO NEGATIVE
378 CONVAL ASO FOUND TITER____
379 CONVAL CRP NEGATIVE
380 CONVAL CRP POSITIVE
381 CONVAL BF OTHER NEGATIVE_____
382 CONVAL BF OTHER POSITIVE (SP)_____
383 CF HISTOPLASMOSIS MYCELIAL NEGATIVE____
384 CF HISTOPLASMOSIS MYCELIAL POSITIVE TITER____
385 CF HISTOPLASMOSIS YEAST NEGATIVE___
386 CF HISTOPLASMOSIS YEAST POSITIVE TITER___
387 CF BLASTOMYCOSIS YEAST NEGATIVE___
388 CF BLASTOMYCOSIS YEAST POSITIVE TITER___
389 CF COCCIDIOIDOMYCOSIS MYCELIAL NEGATIVE___
390 CF COCCIDIOIDOMYCOSIS MYCELIAL POSITIVE TITER____
391 CF COCCIDIOIDOMYCOSIS COCCIDIOIDIN NEGATIVE___
392 CF COCCIDIOIDOMYCOSIS COCCIDIOIDIN POSITIVE TITER___
393 IMMUNO AGAR GEL HISTOPLASMOSIS NEGATIVE
394 IMMUNO AGAR GEL HISTOPLASMOSIS POSITIVE
395 IMMUNO AGAR GEL BLASTOMYCOSIS NEGATIVE
396 IMMUNO AGAR GEL BLASTOMYCOSIS POSITIVE
397 IMMUNO AGAR GEL COCCIDIOIDOMYCOSIS NEGATIVE
398 IMMUNO AGAR GEL COCCIDIOIDOMYCOSIS POSITIVE
399 IMMUNO AGAR GEL OTHER NEGATIVE
400 IMMUNO AGAR GEL OTHER POSITIVE_____
401 CRYPTOCOCCOSIS NEGATIVE___
402 CRYPTOCOCCOSIS POSITIVE TITER___
403 FU OTHER (SP)_____, TITER___
404 TOXOPLASMOSIS IFA NONREACTIVE___
405 TOXOPLASMOSIS IFA WEAKLY REACTIVE___
406 TOXOPLASMOSIS IFA REACTIVE TITER____
407 TOXOPLASMOSIS IHA NONREACTIVE___
408 TOXOPLASMOSIS IHA WEAKLY REACTIVE___
409 TOXOPLASMOSIS IHA REACTIVE TITER____
410 TOXOPLASMOSIS EIA NONREACTIVE___
411 TOXOPLASMOSIS EIA WEAKLY REACTIVE___
412 TOXOPLASMOSIS EIA REACTIVE TITER____
413 TOXOPLASMOSIS IGM NONREACTIVE___
414 TOXOPLASMOSIS IGM WEAKLY REACTIVE___
415 TOXOPLASMOSIS IGM REACTIVE TITER___
416 AMEBIASIS IHA NONREACTIVE___
417 AMEBIASIS IHA WEAKLY REACTIVE___
418 AMEBIASIS IHA REACTIVE TITER____
419 AMEBIASIS LA NONREACTIVE___
420 AMEBIASIS LA WEAKLY REACTIVE___
421 AMEBIASIS LA REACTIVE TITER____
422 AMEBIASIS IMM/DIF NONREACTIVE___
423 AMEBIASIS IMM/DIF WEAKLY REACTIVE___
424 AMEBIASIS IMM/DIF BANDS____

TABLE B-27 (Cont'd)

425 TRICHINOSIS BFT NONREACTIVE___
426 TRICHINOSIS BFT WEAKLY REACTIVE___
427 TRICHINOSIS BFT REACTIVE TITER____
428 TRICHINOSIS LA NONREACTIVE___
429 TRICHINOSIS LA WEAKLY REACTIVE___
430 TRICHINOSIS LA REACTIVE TITER____
431 PL OTHER NONREACTIVE____, (SP)_____
432 PL OTHER WEAKLY REACTIVE____, (SP)_____
433 PL OTHER REACTIVE TITER____, (SP)_____
434 RUBELLA SCREEN NEGATIVE
435 RUBELLA SCREEN EQUIVOCAL
436 RUBELLA SCREEN POSITIVE
437 HEPATITIS B SURFACE AG NEG___ SURFACE AB NEG____ VALUE____
438 HEPATITIS B SURFACE AG NEG___ SURFACE AB POS____ VALUE____
439 HEPATITIS B SURFACE AG POS___ SURFACE AB NEG____ VALUE____
440 HEPATITIS B SURFACE AG POS___ SURFACE AB POS____ VALUE____
441 HEPATITIS B CORE AG NEG___ CORE AB NEG____ VALUE____
442 HEPATITIS B CORE AG NEG___ CORE AB POS____ VALUE____
443 HEPATITIS B CORE AG POS___ CORE AB NEG____ VALUE____
444 HEPATITIS B CORE AG POS___ CORE AB POS____ VALUE____
445 HEPATITIS Be AG NEG___ OTHER AB NEG____ VALUE____
446 HEPATITIS Be AG NEG___ OTHER AB POS____ VALUE____
447 HEPATITIS Be AG POS___ OTHER AB NEG____ VALUE____
448 HEPATITIS Be AG POS___ OTHER AB POS____ VALUE____
449 HEPATITIS A NEGATIVE
450 HEPATITIS A AB POS (INFECT AT SOME UNDETERMINED TIME)
451 HEPATITIS A AB POSITIVE IGM POSITIVE
452 HEPATITIS A AB POSITIVE IGM NEGATIVE
453 MONO SLIDE TEST NEGATIVE___
454 MONO SLIDE TEST POSITIVE___
455 MONO OX CELL HEMOLYSIN NEGATIVE___ TITER____
456 MONO OX CELL HEMOLYSIN POSITIVE___ TITER____
457 MONO OX CELL HETEROPHILE ANTIBODY NEGATIVE___ TITER____
458 MONO OX CELL HETEROPHILE ANTIBODY POSITIVE___ TITER____
459 TEST USED CF
460 TEST USED HI
461 TEST USED IFA
462 TEST USED IHA
463 TEST USED EIA
464 TEST USED SNT
465 TEST USED LA
466 TITER ACUTE 1: ____
467 TITER CONVALESCENT 1: ____
468 INFLUENZA A
469 INFLUENZA B
470 ADENOVIRUS
471 PARAINFLUENZA TYPE 1 (HA2)
472 PARAINFLUENZA TYPE 2 (CA)
473 PARAINFLUENZA TYPE 3 (HAI)

TABLE B-27 (Cont'd)

474	CMV
475	RSV
476	RUBELLA
477	RUBEOLA
478	MUMPS
479	EBV
480	HERPES SIMPLEX
481	EEE
482	WEE
483	SLE
484	CE
485	DENGUE
486	RMSF
487	MURINE TYPHUS
488	EPIDEMIC TYPHUS
489	Q FEVER
490	VARICELLA
491	MYCOPLASMA
492	COXSACKIE
493	CHLAMYDIA (LGV/PSITT)
494	POLIO TYPE 1
495	POLIO TYPE 2
496	POLIO TYPE 3
497	ECHO TYPE___
498	VR OTHER----------
499	RBC__.-
500	WBC__.-
501	HGB__.-
502	HCT(%)__
503	MCV__
504	MCH__
505	MCHC__
506	LYMPHS__.-
507	MONOCYTES__.-
508	EOS__.-
509	BASOS__.-
510	SEGS__.-
511	BANDS__.-
512	METAMYELOCYTES__.-
513	MYELOCYTES__.-
514	PROGRANULOCYTES__.-
515	GRANULOBLASTS__.-
516	OTHER HE WBC ABNORMALITIES__.- ----------
517	HYPERSEG
518	HYPOSEG
519	SMUDGE
520	OTHER HE WBC ABNORMALITIES----------
521	AUER RODS
522	BACTERIA
523	DOEHLE

TABLE B-27 (Cont'd)

```
524        TOXIC GRAN
525        VACUOLES
526        OTHER HE WBC INCLUSIONS__________
527        RBC MORPHOLOGY HYPOCHROMIA NO
528        RBC MORPHOLOGY HYPOCHROMIA YES 1
529        RBC MORPHOLOGY HYPOCHROMIA YES 2
530        RBC MORPHOLOGY HYPOCHROMIA YES 3
531        RBC MORPHOLOGY HYPOCHROMIA YES 4
532        POLYCHROMATOPHILIA NO
533        POLYCHROMATOPHILIA YES 1
534        POLYCHROMATOPHILIA YES 2
535        POLYCHROMATOPHILIA YES 3
536        POLYCHROMATOPHILIA YES 4
537        ANISOCYTOSIS NO
538        ANISOCYTOSIS YES 1
539        ANISOCYTOSIS YES 2
540        ANISOCYTOSIS YES 3
541        ANISOCYTOSIS YES 4
542        POIKILOCYTOSIS NO
543        POIKILOCYTOSIS YES 1
544        POIKILOCYTOSIS YES 2
545        POIKILOCYTOSIS YES 3
546        POIKILOCYTOSIS YES 4
547        MICROCYTOSIS NO
548        MICROCYTOSIS YES 1
549        MICROCYTOSIS YES 2
550        MICROCYTOSIS YES 3
551        MICROCYTOSIS YES 4
552        MACROCYTOSIS NO
553        MACROCYTOSIS YES 1
554        MACROCYTOSIS YES 2
555        MACROCYTOSIS YES 3
556        MACROCYTOSIS YES 4
557        RBC ABNORMALITIES ELLIPTOCYTES NO
558        RBC ABNORMALITIES ELLIPTOCYTES YES
559        TARGET CELLS NO
560        TARGET CELLS YES
561        SPHEROCYTES NO
562        SPHEROCYTES YES
563        SICKLE CELL NO
564        SICKLE CELL YES
565        OTHER RBC ABNORMALITIES NO
566        OTHER RBC ABNORMALITIES YES_____________
567        BASO STIPPLINGS
568        CABOT RINGS
569        HOWELL JOLLY BODIES
570        OTHER HE RBC INCLUSIONS_____________
571        NUCLEATED RBC/100 WBC__.-
```

TABLE B-27 (Cont'd)

572	PLATELETS ABSENT
573	PLATELETS DECREASED
574	PLATELETS NORMAL
575	PLATELETS INCREASED
576	PLATELETS CLUMPED
577	PLATELETS MACROTHROMBOCYTES
578	RETICULOCYTES__._
579	PROTHROMBIN TIME__._
580	BLOOD GROUPING (ASO)___
581	RHO POSITIVE
582	RHO NEGATIVE (DU) NEG
583	RHO VARIANT (DU) POS
584	R_H ANTIBODY NEGATIVE
585	R_H ANTIBODY POSITIVE TITER____
586	DITHIONATE NEGATIVE
587	DITHIONATE POSITIVE
588	DITHIONATE UREA NEGATIVE
589	EITHIONATE UREA POSITIVE
590	HEMOGLOBIN ELECTROPHORESIS PATTERN NORMAL
591	HEMOGLOBIN ELECTROPHORESIS PATTERN ABNORMAL
592	ABNORMAL PATTERN AF
593	ABNORMAL PATTERN AS
594	ABNORMAL PATTERN AC
595	ABNORMAL PATTERN SC
596	ABNORMAL PATTERN SS
597	ABNORMAL PATTERN CC
598	ABNORMAL PATTERN S BETA THAL
599	ABNORMAL PATTERN OTHER_____
600	QUANTITATION AS % OF TOTAL HGB__._
601	ERYTHROCYTE PROTOPORPHYRIN___ ___

*A = alphabetic
*N = numeric

Number of Characters annually: 70,700

TABLE B-28

COUNTRY FILE

Item No.	Alphanumeric Code*	File Item Name
1	NNN	Country Name Code
2	150 Alphabetic	Country Name

COUNTRY CODE

Code	Title
	AFRICA
100	Algeria
101	Angola
102	Benin, People's Republic of
103	Botswana
104	Burundi
105	Cameroon, United Republic of
106	Canary Islands
107	Cape Verde
108	Central African Empire
109	Chad
110	Comoros
111	Congo
112	Djibouti
113	Egypt
114	Equatorial Guinea
115	Ethiopia
116	Gabon
117	Gambia
118	Ghana
119	Guinea
120	Guinea-Bissau
121	Ivory Coast
122	Kenya
123	Lesotho
124	Liberia
125	Libyan Arab Jamahiriya
126	Madagascar
127	Meedira
128	Malawi
129	Mali
130	Mauritania
131	Mauritius
132	Morocco

Table B-28 (Cont'd)

AFRICA (Cont'd)

133	Mozambique
134	Namibia
135	Niger
136	Nigeria
137	Reunion
138	Rwanda
139	Saint Helena
140	Sao Tome and Principe
141	Senegal
142	Seychelles
143	Sierra Leone
144	Somalia
145	South Africa
146	Spanish Sahara
147	Sudan
148	Swaziland
149	Tanzania, United Republic of
150	Togo
151	Tunisia
152	Uganda
153	Upper Volta
154	Zaire
155	Zambia
156	Zimbabwe

THE AMERICAS

200	Argentina
201	Belize
202	Bermuda
203	Bolivia
204	Brazil
205	Canada
206	Canal Zone
207	Chile
208	Columbia
209	Costa Rica
210	Cuba
211	Ecuador
212	El Salvador
213	Falkland Islands
214	French Guiana
215	Greenland
216	Guatemala
217	Guyana
218	Honduras
219	Mexico
220	Nicaragua
221	Panama

Table B-28 (Cont'd)

THE AMERICAS (Cont'd)

222	Paraguay
223	Peru
224	Saint Pierre and Miquelon
225	Surinam
226	United States of America
227	Uruguay
228	Venezuela

THE CARIBBEAN

300	The Bahama Islands
301	Cayman Islands
302	Greater Antilles: Dominican Republic, Haiti, Jamaica
303	Lesser Antilles: Aruba, Bonaire, Curacao, Trinidad and Tobago
304	All Leeward Islands: Anguilla, Antigua, Barbuda, the British Virgin Islands, Guadeloupe, Monserrat, Nevis, Redonda, Saint Kitts, Saint Martin
305	All Windward Islands: Barbados, Dominica, Grenada, the Grenadines, Martinique, Saint Lucia, Saint Vincent

ASIA

400	Afghanistan
401	Bahrain
402	Bangladesh
403	Brunei
404	Burma
405	China (People's Republic of)
406	China, Republic of (Taiwan)
407	Cyprus
408	Democratic Kampuchea
409	East Timor
410	Hong Kong
411	India
412	Indonesia
413	Iran
414	Iraq
415	Israel
416	Japan
417	Jordan

Table B-28 (Cont'd)

ASIA (Cont'd)

418	Korea, Democratic People's Republic of (North)
419	Korea, Republic of (South)
420	Kuwait
421	Lao People's Democratic Republic
422	Lebanon
423	Macao
424	Malaysia
425	Maldives
426	Mongolia
427	Nepal
428	Oman
429	Pakistan
430	Phillippines
431	Qatar
432	Ryukyu Islands
433	Saudi Arabia
434	Sri Lanka
435	Syrian Arab Republic
436	Thailand
437	Turkey
438	United Arab Emirates
439	Viet Nam
440	Yemen
441	Yemen, Democratic

EUROPE

500	Albania
501	Austria
502	Azores
503	Belgium
504	Bulgaria
505	Czechoslovakia
506	Denmark
507	Faroe Islands
508	Finland
509	France
510	Germany (East)
511	Germany (West)
512	Gilbraltar
513	Greece
514	Guernsey, Alderney, and Sark
515	Hungary
516	Iceland
517	Ireland
518	Isle of Man

Table B-28 (Cont'd)

EUROPE (Cont'd)

519	Italy
520	Jersey
521	Liechtenstein
522	Luxembourg
523	Malta
524	Monaco
525	Netherlands
526	Norway
527	Poland
528	Portugal
529	Romania
530	Spain
531	Sweden
532	Switzerland
533	Union of Soviet Socialist Republics (Russia)
534	United Kingdom (England, Scotland, Northern Ireland, Wales)
535	Yugoslavia

OCEANIA

600	American Samoa
601	Australia
602	Christmas Island
603	Cocos (Keeling) Island
604	Cook Islands
605	Fiji
606	French Polynesia (Tahiti)
607	Gilbert Islands
608	Guam
609	Kiribati
610	Nauru
611	New Caledonia
612	New Hebrides
613	New Zealand
614	Niue
615	Norfolk Island
616	Pacific Islands, Trust Territory of the USA
617	Papua New Guinea
618	Pitcairn Island
619	Samoa
620	Solomon Islands
621	Tokelau Islands

Table B-28 (Cont'd)

OCEANIA (Cont'd)

622	Tonga
623	Vanuatu
624	Wake Island
625	Wallis and Futuna Islands

*A = alphabetic
*N = numeric

Permanent 30,600 characters

Table B-29

WORK TIME UNITS PROCEDURES FILE

Item No.	Alphanumeric Item Code*	File Item Name
1	NNN	Work Time Unit Procedure Code
2	85 Alphanumeric	Work Time Unit Procedure Name

*N = numeric

Number of characters annually: 51,000

WORK STATION VIDEO DISPLAY SCREENS/FORMATS

Introduction

This section of the report contains 35 suggested video display screens for entering data to the Data Base Management System (DBMS). Table C-1 defines the screens by type, number, and use.

Sixteen laboratory areas and subareas are covered by this data entry capability. A complete set of the 35 video display formats is included in this section labeled Figures C-1 through C-35. Figure C-1 is a menu screen which would be used to access the other screens. Figure C-36 is an example of a possible reporting format. Data collected by this system can be used to prepare working papers and output reports such as accession logs, preliminary and final specimen results, and various types of administrative data for both the laboratory and the laboratory user. Such data are necessary for both effective laboratory management and improved health program interface. Because of the overwhelming clerical effort required to collect and maintain such data, these data have not been available in a manual system.

The first step in activating the DBMS for data input would be to display the menu screen which identifies the laboratory areas and subareas. A pretest or post-test screen for any particular area or subarea would be obtained by a single key stroke in the appropriate menu screen matrix. Once the appropriate pretest or post-test screen had been selected and displayed on the CRT, data would be entered by direct keying.

TABLE C-1

WORK STATION VIDEO DISPLAY SCREENS

Type	Number	Description and Use
Menu	1	A list of laboratory sections from which the operator might select a particular screen format for encoding data.
Pretest	16	Demographic data identifying the specimen, patient, and submitter before the specimen is tested.
Post-test	18	Data entered to update the pretest information as to laboratory results following testing of the specimen.
Laboratory Specimen Report (Sample)	1	An example of a laboratory specimen result report that might be prepared by the DBMS for transmission to the specimen submitter.

NOTE: The work station video display screens are suggestions of how input screens might be formatted. Actual formatting will depend on the data needs of any specific laboratory. The screen shown as Figure C-32 might need to be used to enter data several times on one specimen since not only would run a battery (CF, e.g.), but one might run several types of tests against the same antigen.

Data Types

Data to be entered is of three types: (1) common, (2) fixed, and (3) free-form data. These are defined as follows:

(1) "Common data" is the term used for initial laboratory, submitter and patient data, and for demographic information needed to log and properly identify each new specimen (Table C-2). These data follow a particular specimen from pretest encoding to the keying of post-test results. The data are stored in apropriate computer files for future reference.

(2) "Fixed data" is the term used for data unique to each laboratory area or subarea screen. The data are formatted as a menu from which the appropriate selection can be made by a single key stroke (table C-3).

(3) "Free-form data" is the term used for "other" data not previously defined as common or fixed data; i.e., nonroutine requests for special procedures and the posting of nonroutine laboratory results (table C-4). A free-form data entry is permitted in each of the 34 pretest or post-test screens as "other" data.

Forms Used to Capture Data

The CRT formats described in this section were developed on the premise that laboratories wishing to use this DBMS would not be required to redesign their existing specimen submission forms. Therefore, it should be understood

TABLE C-2

Common data Elements

Pretest (16 screens)		Post-test (18 screens)*	
Elements	Strokes**	Elements	Strokes**
Accession Number	10	Accession Number	10
Date Collected	6	Analyst Identification	4
Clinical Specimen	1	Date Reported	6
Program Number	2	Specimen Unsatis. Code	2
Date Received	6	Specimen Referred	2
Referred Specimen	1		
Billing Number	10		
Date of On-Set	6		
Acute	1		
Convalescent	1		
Patient Name	20		
Date of Birth	6		
Male	1		
Female	1		
Race	1		
Patient Street	20		
Patient City	20		
Patient County	2		
Patient State	2		
Patient Zip Code	9		
Submitter Identification	10		
TOTAL STROKES	136	TOTAL STROKES	24

*Mycobacteriology and hematology each have two post-test screens.
**These are the number of strokes permitted.

TABLE C-3
Fixed Data Elements
(One Stroke Entry Required)

Pretest (16 screens)		Post-test (18 screens)*	
Elements	Number**	Elements	Number**
Specimen Type	10		
Specimen/Culture Source	31		
Test (Exam) Requested	56		
Animal Type	22		
Race	6		
Reason for Sexually Transmitted Diseases Treatment	25		
		Test Result	287
		Reason for Unsatis. Specimen	50
TOTAL STROKES	150	TOTAL STROKES	337

*Mycobacteriology and Hematology each have two post-test screens

**These are the number of elements in the menu. See Section II, Data Files, for menu discussion and Section III, CRT Screens, for examples of menus.

TABLE C-4
Free-Form Data Elements

Pretest (16 screens)

Elements	Number of Occurrences	Number of Strokes Permitted
Specimen Type Other	5	15-20
Specimen/Culture Source Other	8	15-20
Test (Exam) Requested Other	9	15-20
Animal Type Other	1	15
Foreign Travel (Country, Month, Year)	3	7*
Domestic Travel (State, Month, Year)	3	6*

Post-test (18 screens)**

Elements	Number of Occurrences	Number of Strokes Permitted
Test (Exam) Results Plus Numerical Value	125	4-27
Test (Exam) Results Other	38	15-20
Reason for Unsatisfactory Specimen Other	1	2

* Three character strokes are required for county identification, and two for state identification, two for the month, and two for the year. These data are encoded during initial file loading and are then keyed by selection of the appropriate code from a menu. These data are primarily used for epidemiologic studies in three areas: Enteric bacteriology, parasitology, and virology.

** Mycobacteriology and hematology each have two post-test screens.

that some data elements contained within these suggested screens will not be meaningful to all state public health laboratries. Laboratories electing to use this DBMS can input data from their existing laboratory submission form but may find it advantageous to revise their submission forms to reduce clerical effort in key transcription time.

DATA TRANSCRIPTION

What levels of efficiency, in terms of hours worked, could be achieved by use of this DBMS? Assuming that all data elements were entered for each laboratory specimen submitted, 210 pretest key strokes and 75 post-test key strokes (285 total) would be required to enter the data (table C-5).

The average beginning data transcriber keys (types) at a rate of approximately 250 strokes per minute (45-50 words per minute). Approximately 1.14 minutes (285/250 = 1.14) would be required to enter the maximum amount of data permissible on any one specimen submission form.

Based upon an average of 500,000 specimens processed annually by a laboratory, estimates are that approximately 9,615 specimens would be processed during each of the 52 weeks. Multiplying this weekly number of specimens (9,615) by 1.14 minutes (required entry time for all elements per specimen), we find that 10,961 minutes, or 183 transcriber hours, are required for maximum pretest and post-test data transcription on a weekly basis. Reducing total hours to full-time equivalent employees (FTEE) (183 hours/40 hours, a normal work week), we determine that 4.6 or 5.0 FTEE's (data transcribers) would be required for an annual workload of 500,000 specimens.

Following the same methodology for minimum data transcription, we determine that 166 key strokes (counting only common and fixed data for both pretest and post-test) would be required to enter all possible submitted data (table C-5). This would require the efforts of 2.7 or 3.0 FTEE's. Thus, it can be assumed that 3.0 to 5.0 FTEE's can efficiently input all data required or permitted by the DBMS based on a workload of 500,000 specimens annually. Each installation would have to allow for substitutes for vacations, sickness, and other general relief of key transcribers.

These calculations have been based on a 40-hour work week. The basic work week at any particular laboratory, assuming it to be less than 40 hours (37.5 for example), would alter the FTEE calculations.

Although the DBMS may require 3.0 to 5.0 FTEE's to transcribe data, it is important to remember the following:

1. Data is input only once, not several times as with a manual system.

2. Test result data should be entered by the laboratorian who actually performs the test. This places the concern for accuracy on the technician who performed the test and who also enters the test result.

3. Specimen, patient, submitter, and laboratory data are retained for later use (management, research, etc.).

TABLE C-5

Maximum/Minimum Key Strokes Required
for Work Station Video Display Screens

Data Type	Pretest	Post-test	Total Max.	Total Min.
Common	136	24	160	160
Fixed	4	2	6	6
Free Form	70	49	119	0
TOTAL	210	75	285	166

4. Clerical effort is reduced, but efficiency and accuracy are increased.

Pretest Common Data Elements Described/Defined

Accession Number - Identifies each specimen by a unique number. This number may contain up to 10 digits with 6 digits representing the accession number followed by 4 digits representing the month and year.

Program Number - Identifies each public health program receiving laboratory services by a numeric two-digit code; e.g., Sexually Transmitted Diseases, Tuberculosis, and Maternal and Child Health.

Date Collected - Is the date on which the specimen was taken for submission to the laboratory. Six digits are permitted, two for the day, two for the month, and two for the year. However, through a software modification, a single digit (key stroke) might be used to enter the current date. This would require programming with a continuous calendar and a code to enter the desired date, as shown in the example below. In this example, the current date is January 10, 1982.

MENU	CODE (To be keyed)	EXAMPLE
Today's Date	0	011082
One Day Previous	1	010982
Two Days Previous	2	010882
Three Days Previous	3	010782
Four Days Previous	4	010682
Five Days Previous	5	010582

Date Received - Is the day on which the specimen actually receives an accession number in the laboratory. This requires a six-digit entry, but could be modified to be a single key stroke. For example, one key stroke could indicate the specimen was received yesterday; another single key stroke would indicate the specimen was received today. The computer would supply the correct date.

Date of Onset - Is the date on which clinical symptoms of a pathogenic infection were first observed. This requires a six-digit entry but could be modified as described under Date Collected.

Clinical Specimen - Is the specimen submitted through public health facilities for initial testing. This is not to be confused with a referral specimen. A single key stroke is required for data entry.

Referred Specimen - Is the specimen submitted as a confirmation check after the initial examination of the specimen by another laboratory. A single key stroke is required for data entry.

Acute - Describes the stage of illness at the time specimen was taken (i.e., onset of disease). A single key stroke is required for data entry.

Convalescent - Is the stage of a disease in which the patient is no longer considered infectious, but is recuperating. A single key stroke is required for data entry.

Patient Name - Is the name of the patient from whom the specimen was taken. Twenty alphabetic characters (key strokes) are permitted for entering patient's first name, middle initial, and last name.

Date of Birth - Is the day, month, and year on which the patient, from whom the specimen was taken, was born. Six digits (two for the day, two for the month, and two for the year) are permitted for data entry.

Male/Female - The sex of the person from whom the specimen was taken. A single stroke is required for data entry.

Race - Describes the ethnic origin of the patient from whom the specimen was taken. Such data is significant for epidemiology studies, laboratory use, and administration and health program management. A single key stroke is required for data entry.

Street - Is the resident address of the patient from whom the specimen was taken. Twenty characters (5 numeric and 15 alphanumeric) are permitted for data entry.

City - Is the municipality in which the patient resides. Twenty alphabetic characters are permitted for data entry.

County - Is the largest administrative unit (local government) of a state. Two digits are required for data entry after menu selection. Each county will have a two-character code, which is usually fixed by the state.

State - Is one of the 52 definite territorial units of the United States. Two characters are required for data entry after a menu selection.

Zip Code - A five- or nine-digit number that identifies each postal delivery zone in the United States.

Submitter - Is the name of the person or facility submitting the specimen for testing. Ten alphanumeric characters are permitted for data entry. A master code for all laboratory users would be developed and coded to provide complete address, medical specialty, and type of practice or facility served.

Post-test Common Data Elements Described

Accession Number - This element is described under Pretest, Common Data Elements. It would be the same unique number as used for the pretest specimen.

Analyst - Is the laboratorian who performs the testing of the specimen. A four-digit code is used to identify not only the analyst but also the laboratory area or subarea in which the analyst works.

Date Reported - Is the date on which the test result is transmitted to the submitter. Although six digits are allowed, the DBMS could be programmed for a single-key entry (see Pretest Common Data Elements, Date Received).

Specimen Unsatisfactory - Is a two-digit code which is used to identify, from a menu, the cause for rejection of a specimen that is unsatisfactory for laboratory testing or interpretation.

Specimen Referred - Is a two-digit code which identifies those specimens that have been split and sent to some other area within the laboratory, or to another laboratory (e.g., CDC).

Pretest and Post-test Fixed Data

Fixed data for both pretest and post-test screens are self-explanatory. All fixed data are entered by a single key stroke.

Pretest and Post-test Free-Form Data

Free-form pretest data is primarily patient name, date of birth, street, and city. As previously mentioned, some "other" data is free form.

Free-form post-test data is primarily nonstandard test results.

Coding Alternatives

Each video display screen format, as shown in this Section, implies placement of cursor, then movement of cursor after data entry. Several methods are available to reduce the number of key strokes used to enter data. We will discuss some. In one method, numbered menu screen items, only the key strokes necessary to call up a particular discipline screen would be needed. In another method, on the pretest data, the zip code could be used to identify city, county, and state and thereby eliminate 20 key strokes. This concept

must be carefully analyzed by each state laboratory before it is implemented and then adequate file structures must be developed. In a third method, such items as Specimen Source, Specimen Type, and Exam Requested could be identified numerically and their data entered by one or two key strokes. In another method, items such as Clinic/Referred Specimen and Acute-Convalescent Specimens could be considered as mutually exclusive items and entered by a single key stroke. And finally, the item, sex, could be numerically identified as 1, 2, or 3, with 1 representing male; 2, female; and 3, undetermined.

Video Display Screen Symbols

The following symbols are used in Figures C-1 through C-36 to indicate type of data, cursor locations, and space for the keying of additional information.

Symbol or Entry Key		Used to Indicate
___	Underline	Cursor Location
/	Slash	Alphanumeric Data
+	Plus	Numeric Data
-	Dash	Entry of Additional Data

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1                        LABORATORY MINICOMPUTER
 2
 3                                 MENU
 4
 5          BACTERIOLOGY                    Pretest Code     Posttest Code
 6             Nasopharyngeal                 _ NA1            _ NA2
 7             Serogrouping Serotyping        _ SE1            _ SE2
 8             Mycobacterium                  _ TB1            _ TB2
 9                                                             _ TB3
10             Enteric                        _ EN1            _ EN2
11             N. gonorrhoeae                 _ GC1            _ GC2
12             Miscellaneous                  _ MB1            _ MB2
13          MYCOLOGY                          _ MY1            _ MY2
14          PARASITOLOGY                      _ PA1            _ PA2
15          VIROLOGY                          _ VI1            _ VI2
16             Rabies                         _ RA1            _ RA2
17          IMMUNOLOGY
18             Syphilis                       _ TP1            _ TP2
19             Bacterial Febrile              _ BF1            _ BF2
20             Fungal                         _ FU1            _ FU2
21             Parasitic                      _ PL1            _ PL2
22             Viral and Rickettsial          _ VR1            _ VR2
23          HEMATOLOGY                        _ HE1            _ HE2
24                                                             _ HE3
```

FIGURE C-1
Menu Screen

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1
 2                              BACTERIOLOGY NASOPHARYNGEAL (NA1)
 3
 4                                        PRETEST
 5
 6  ACCESSION NUMBER ++++++++++   DATE COLLECTED ++++++   CLINIC SPECIMEN      _
 7  PROGRAM NUMBER    ++          DATE RECEIVED  ++++++   REFERRED SPECIMEN    _
 8  BILLING NUMBER   ++++++++++   DATE OF ONSET  ++++++   ACUTE _ CONVALESCENT _
 9
10  PT NAME ____________________   DATE OF BIRTH  ++++++   MALE _ FEMALE _ RACE +
11  STREET /////_______________   CITY____________________ COUNTY __ STATE __
12  ZIP CODE +++++++++  SUBMITTER //////////
13
14    SPECIMEN SOURCE        SPECIMEN TYPE                EXAM REQUESTED
15    NOSE                   THROAT CULTURE      _        DIPHTHERIA
16    THROAT          _      THROAT SWAB         _        STREPTOCOCCUS        _
17    OTHER           _      NASAL SWAB          _        STAPHYLOCOCCUS       _
18    ---------------        SWAB TRANS MEDIA    _        B PERTUSSIS          _
19                           OTHER ____________  _        OTHER ____________   _
```

FIGURE C-2
Pretest Nasopharyngeal Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
1
2                                BACTERIOLOGY NASOPHARYNGEAL (NA2)
3
4                                        POSTTEST
5
6   ACCESSION NUMBER ++++++++++ ANALYST +++ DATE REPORTED ++++++
7   SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
8
9         DIPHTHERIA                STREPTOCOCCUS              STAPHYLOCOCCUS
10  Not Found                 _     Group A Not Found  _       Coagulase Positive
11  Found Not Toxigenic       _     Group A Found      _       Not Found          _
12  Found Toxigenic           _                                Found              _
13
14   B PERTUSSIS          B PARAPERTUSSIS        OTHER _________
15  Culture Neg  _        Not Found      _       Not Found  __
16  Culture Pos  __       Found          _       Found      _
17  FA Neg       _
18  FA Pos       _
```

FIGURE C-3
Post-test Nasopharyngeal Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1
 2                        BACTERIOLOGY SEROGROUPING*SEROTYPING (SE1)
 3
 4                                          PRETEST
 5  ACCESSION NUMBER ++++++++++   DATE COLLECTED ++++++   CLINIC SPECIMEN      _
 6  PROGRAM NUMBER   ++           DATE RECEIVED  ++++++   REFERRED SPECIMEN    _
 7  BILLING NUMBER   ++++++++++   DATE OF ONSET  ++++++   ACUTE _ CONVALESCENT _
 8
 9  PT NAME ____________________   DATE OF BIRTH  ++++++   MALE _ FEMALE _ RACE +
10  STREET  /////_______________   CITY____________________ COUNTY __ STATE __
11  ZIP CODE +++++++++  SUBMITTER //////////
12
13             CULTURE SOURCE                        TEST REQUESTED
14
15  Blood    _   CSF      _   Food      _        Neisseria meningitidis _
16  Gastric  _   Hair     _   Wound     _        Klebsiella             _
17  Serum    _   Skin     _   Exudate   _        H influenzae           _
18  Sputum   _   Stool    _   Tissue    _        Listeria               _
19  Urine    _   Other    _   Throat    _        Vibrio                 _
20               ---------------                 Other ---------------  _
```

FIGURE C-4
Pretest Serogrouping/Serotyping Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
1
2                        BACTERIOLOGY SEROGROUPING*SEROTYPING (SE2)
3
4                                    POSTTEST
5
6   ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE REPORTED ++++++
7   SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
8
9                                SEROGROUPING SEROTYPING
10
11                        Neisseria meningitidis Serogroup ++ _
12                        Klebsiella Type +++                _
13                        H influenzae Type +++              _
14                        Listeria                           _
15                        Vibrio ____________________        _
16                        Other  ____________________        _
```

FIGURE C-5
Post-test Serogrouping/Serotyping Screen

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1
 2                              BACTERIOLOGY MYCOBACTERIUM (TB1)
 3
 4                                        PRETEST
 5
 6  ACCESSION NUMBER ++++++++++   DATE COLLECTED ++++++   CLINIC SPECIMEN      _
 7  PROGRAM NUMBER   ++           DATE RECEIVED  ++++++   REFERRED SPECIMEN    _
 8  BILLING NUMBER   ++++++++++   DATE OF ONSET  ++++++   ACUTE _ CONVALESCENT _
 9
10  PT NAME ____________________  DATE OF BIRTH ++++++   MALE _ FEMALE _ RACE +
11  STREET /////_______________   CITY____________________ COUNTY __ STATE __
12  ZIP CODE +++++++++  SUBMITTER //////////
13
14                                    SPECIMEN SOURCE
15
16                                 Sputum (Natural)      __
17                                 Sputum (Nebulizer)    __
18                                 Gastric Washing       _
19                                 Other _____________   _
```

FIGURE C-6
Pretest Mycobacterium Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1
 2                              BACTERIOLOGY MYCOBACTERIUM (TB2)
 3
 4                                        POSTTEST
 5
 6  ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE REPORTED ++++++
 7  SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
 8
 9                                  MICROSCOPIC EXAMINATION
10                        (Ziehl-Neelsen) No AFB Observed _  AFB Observed _
11                             (Fluorochrome) Negative _  Positive _
12
13                                MYCOBACTERIUM (SPECIES) IDENTIFIED
14    Slow Growing          Photochromogens        Scotochromogens        Nonphotochromogens
15  M tuberculosis _    M kansasii _          M scrofulaceum _       M avium _
16  M bovis        _    M marinum  _          M szulgai      _       M terrae _
17  Other          _    M simiae   _          M xenopi       _       M gastri _
18  ---------------     M asiaticum _         M gordonae     _       M triviale _
19                      Other      _          M flavescens   _       M malmoense _
20                      ---------------       Other          _       M haemophilum _
21                                            ---------------        Other---------- _
22  Rapid Growing: M fortuitum _  M chelonei _  Other---------- _
23  Pathogenicity: Strictly Pathogenic _  Potentially Pathogenic _
24                 Rarely Pathogenic _  Probably Non-Pathogenic _
```

FIGURE C-7
Post-test Mycobacterium Screen 1

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
1                          BACTERIOLOGY MYCOBACTERIUM (TB3)
2                                    POSTTEST
3  ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE REPORTED ++++++
4  SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
5
6                  DRUG SUSCEPTIBILITY TEST: DIRECT   INDIRECT
7            DRUG MCG ML      DILUTION COLONY   DILUTION   >1%=RESISTANT
8                               COUNT 10+    % RESISTANT  <1%=SUSCEPTIBLE
9
10      Control +++++                 +++           +++
11      Capreomycin 10.0              +++           +++
12      Streptomycin 2.0              +++           +++
13      Streptomycin 10.0             +++           +++
14      Isoniazid 0.2                 +++           +++
15      Isoniazid 1.0                 +++           +++
16      Isoniazid 5.0                 +++           +++
17      Para Aminosalicylic A 2.0     +++           +++
18      Rifampin 1.0                  +++           +++
19      Ethionamide 5.0               +++           +++
20      Kanamycin 5.0                 +++           +++
21      Pyrazinamide 50.0             +++           +++
22      D Cycloserine 30.0            +++           +++
23      Ethambutol                    +++           +++
24      Other ____________________    +++           +++
```

FIGURE C-8
Post-test Mycobacterium Screen 2

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
1
2                                BACTERIOLOGY ENTERICS (EN1)
3
4                                      PRETEST
5
6  ACCESSION NUMBER ++++++++++   DATE COLLECTED ++++++   CLINIC SPECIMEN      -
7  PROGRAM NUMBER   ++           DATE RECEIVED  ++++++   REFERRED SPECIMEN    -
8  BILLING NUMBER   ++++++++++   DATE OF ONSET  ++++++   ACUTE _ CONVALESCENT -
9
10 PT NAME ____________________   DATE OF BIRTH  ++++++   MALE _ FEMALE _ RACE +
11 STREET   /////______________   CITY____________________ COUNTY __ STATE __
12 ZIP CODE +++++++++  SUBMITTER //////////
13
14             SPECIMEN SOURCE              TRAVEL                TEST REQUESTED
15
16             Urine    _          Foreign +++   U.S.A.  ++    Salmonella      _
17             Stool    _          Month   ++    Month   ++    Shigella        _
18             Blood    _          Year    ++    Year    ++    E coli          _
19             Rectal   _                                      Campylobacter   _
20             Food     _                                      S typhi         _
21             Other    _                                      Other           _
22             ---------------                                 ---------------
```

FIGURE C-9
Pretest Enterics Screen

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1
 2                              BACTERIOLOGY ENTERICS (EN2)
 3
 4                                      POSTTEST
 5
 6  ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE REPORTED ++++++
 7  SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
 8
 9                              NO ENTERIC PATHOGENS FOUND _
10
11                                  IDENTIFICATION
12       Salmonella (Found)          Shigella (Found)   Serotype     E coli __________
13       Typhimurium        _       Group A dysenteriae   +++
14       Heidelberg         _       Group B flexneri      +++
15       Enteritidis        _       Group C boydii        +++
16       Newport            _       Group D sonnei        +++
17       Infantis           _                                        Other
18       Agona              _                                        ----------
19       Montevideo         _
20       Typhi //////(Phage)_       Campylobacter fetus
21       Saint Paul         _       Subspecies ----------
22       Javiana            _
23       Arizona hinshawii  _
24       Other----------
```

FIGURE C-10
Post-test Enterics Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
1
2                              BACTERIOLOGY N. GONORRHOEAE (GC1)
3
4                                        PRETEST
5
6   ACCESSION NUMBER ++++++++++   DATE COLLECTED ++++++   CLINIC SPECIMEN       _
7   PROGRAM NUMBER   ++           DATE RECEIVED  ++++++   REFERRED SPECIMEN     _
8   BILLING NUMBER   ++++++++++   DATE OF ONSET  ++++++   ACUTE _ CONVALESCENT _
9
10  PT NAME _____________________ DATE OF BIRTH  ++++++   MALE _ FEMALE _ RACE +
11  STREET  /////_______________  CITY____________________ COUNTY __ STATE __
12  ZIP CODE +++++++++  SUBMITTER //////////
13
14   SPECIMEN SOURCE                          REASON FOR TEST
15
16   Genitourinary _     Premarital  _    Employment      _    RX Control      _
17   Rectal        _     Prenatal    _    Jail            _    Recheck         _
18   Throat        _     Volunteer   _    Food Handler    _    Contact         _
19   Other         _     Survey      _    Licensure       _    Diagnosis       _
20   ---------------     Inpatient   _    Migrant         _    Test of Cure    _
21                       Outpatient  _    Manpower Training _  Medicheck       _
22                       Emergency Room _ Self-Motivated  _    Syphilis Check  _
23                       Military    _    Physician Susp  _    Unspecified     _
```

FIGURE C-11
Pretest N. gonorrhoeae Screen

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
1
2                          BACTERIOLOGY N. GONORPHOEAE (GC2)
3
4                                   POSTTEST
5
6  ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE REPORTED ++++++
7  SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
8
9     GRAM-NEGATIVE DIPLOCOCCI                    MISCELLANEOUS STD'S
10
11      Not Found _                 N. gonorrhoeae    Found _  Not Found _
12      Found Intracellular _       PPNG              Found _  Not Found _
13      Found Extracellular _       N. meningitidis   Found _  Not Found _
14                                  Trichomonas       Found _  Not Found _
15                                  Candida (Monilia) Found _  Not Found _
16                                  Other ----------- Found _  Not Found _
```

FIGURE C-12
Post-test N. gonorrhoeae Screen

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
1
2                              BACTERIOLOGY MISCELLANEOUS (MB1)
3
4                                        PRETEST
5
6  ACCESSION NUMBER ++++++++++   DATE COLLECTED ++++++   CLINIC SPECIMEN      _
7  PROGRAM NUMBER   ++           DATE RECEIVED  ++++++   REFERRED SPECIMEN    _
8  BILLING NUMBER   ++++++++++   DATE OF ONSET  ++++++   ACUTE _ CONVALESCENT _
9
10 PT NAME ____________________   DATE OF BIRTH  ++++++   MALE _ FEMALE _ RACE +
11 STREET  /////_______________   CITY____________________ COUNTY __ STATE __
12 ZIP CODE +++++++++  SUBMITTER ///////////
13
14                                    SPECIMEN SOURCE
15
16                                Blood   _     CSF     _
17                                Urine   _     Skin    _
18                                Stool   _     Throat  _
19                                Sputum  _     Wound   _
20                                Exudate _     Other   _
21                                              ____________________
```

FIGURE C-13
Pretest Bacteriology Miscellaneous Screen

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1
 2                          BACTERIOLOGY MISCELLANEOUS (MB2)
 3
 4                                   POSTTEST
 5
 6  ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE REPORTED ++++++
 7  SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
 8
 9
10                           No Organism Isolated _
11
12                           Organism Isolated    _
13                           --------------------
```

FIGURE C-14
Post-test Bacteriology Miscellaneous Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1
 2                                    MYCOLOGY (MY1)
 3
 4                                     PRETEST
 5
 6  ACCESSION NUMBER ++++++++++   DATE COLLECTED ++++++   CLINIC SPECIMEN      _
 7  PROGRAM NUMBER   ++           DATE RECEIVED  ++++++   REFERRED SPECIMEN    _
 8  BILLING NUMBER   ++++++++++   DATE OF ONSET  ++++++   ACUTE _ CONVALESCENT _
 9
10  PT NAME ____________________  DATE OF BIRTH  ++++++   MALE _ FEMALE _ RACE +
11  STREET  /////_______________  CITY____________________ COUNTY __ STATE __
12  ZIP CODE +++++++++  SUBMITTER //////////
13
14                                  SPECIMEN SOURCE
15
16                          Hair           _ Sputum          _
17                          Skin Scraping  _ Nasopharyngeal  _
18                          Nails          _ Urine           _
19                          CSF            _ Lymph Nodes     _
20                          Abscess        _ Other           _
21                                             ----------
```

FIGURE C-15
Pretest Mycology Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1
 2                                    MYCOLOGY (MY2)
 3
 4                                    POSTTEST
 5
 6  ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE OF REPORT ++++++
 7  SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
 8                                  CULTURE FINDINGS
 9   Culture Results Negative                  _    Penicillium ____________________  _
10   Cladosporium ____________________         _    Blastomyces dermatitidis          _
11   Candida albicans                          _    Coccidioides immitis              _
12   Candida tropicalis                        _    Histoplasma capsulatum            _
13   Candida parapsilosis                      _    Sporothrix schenckii              _
14   Candida krusei                            _    Nocardia asteroides               _
15   Candida ____________________              _    Nocardia ____________________     _
16   Torulopsis glabrata                       _    Actinomadura madurae              _
17   Cryptococcus neoformans                   _    Streptomyces ____________________ _
18   Trichosporon beigelii                     _    Trichophyton rubrum               _
19   Aspergillus flavus                        _    Trichophyton tonsurans            _
20   Aspergillus fumigatus                     _    Trichophyton ____________________ _
21   Aspergillus niger                         _    Microsporum canis                 _
22   Aspergillus ____________________          _    Microsporum ____________________  _
23   Exophiala jeanselmei                      _    Other ____________________        _
24   Wangiella dermatitidis                    _
```

FIGURE C-16
Post-test Mycology Screen

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
1
2                                  PARASITOLOGY (PA1)
3
4                                     PRETEST
5
6  ACCESSION NUMBER ++++++++++   DATE COLLECTED ++++++   CLINIC SPECIMEN      _
7  PROGRAM NUMBER   ++           DATE RECEIVED  ++++++   REFERRED SPECIMEN    _
8  BILLING NUMBER   ++++++++++   DATE OF ONSET  ++++++   ACUTE _ CONVALESCENT _
9
10 PT NAME ____________________   DATE OF BIRTH  ++++++   MALE _ FEMALE _ RACE +
11 STREET  /////_______________   CITY____________________ COUNTY __ STATE __
12 ZIP CODE +++++++++ SUBMITTER  //////////
13
14              SPECIMEN TYPE                                TRAVEL
15
16        Arthropod                  _                 Foreign +++   USA     ++
17        Blood Smear                _                 Month   ++    Month   ++
18        Feces (Cellulose Tape)     _                 Year    ++    Year    ++
19        Stool                      _
20        Other _______________      _
```

FIGURE C-17
Pretest Parasitology Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
1                              PARASITOLOGY POSTTEST (PA2)
2
3   ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE OF REPORT ++++++
4   SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
5
6      NO PARASITIC FORMS FOUND _    ARTHROPOD IDENTIFIED AS ____________________
7                                 INTESTINAL PARASITES FOUND
8           Protozoa          Trophs Cysts        Helminths          Eggs Larv Adult
9      Dientamoeba fragilis    +++                Ascaris lumbricoides  +++       +++
10     Endolimax nana          +++   +++          Enterobius vermicularis +++     +++
11     Entamoeba coli          +++   +++          Hookworm _____________ +++ +++  +++
12     Entamoeba hartmanni     +++   +++          Strongyloides stercoralis   +++  +++
13     Entamoeba histolytica   +++   +++          Trichuris trichiura   +++       +++
14     Iodamoeba butschlii     +++   +++          Hymenolepis nana      +++       +++
15     Chilomastix mesnili     +++   +++          Clonorchis sinensis   +++
16     Giardia lamblia         +++   +++          Taenia saginata       +++       +++
17     Other _____________     +++   +++          Taenia solium         +++ +++   +++
18                                                Diphyllobothrium latum +++      +++
19     Malaria                                    Schistosoma mansoni   +++
20          Plasmodium falciparum  _              Schistosoma japonicum +++
21          Plasmodium ovale       _              Schistosoma haematobium +++
22          Plasmodium vivax       _              Paragonimus westermani +++
23          Plasmodium malariae    _              Fasciolopsis buski    +++
24     Other Blood Parasites       _              Other_____________________ +++ +++ +++
```

FIGURE C-18
Post-test Parasitology Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
1
2                                   VIROLOGY (VI1)
3
4                                    PRETEST
5
6   ACCESSION NUMBER ++++++++++   DATE COLLECTED ++++++   CLINIC SPECIMEN      -
7   PROGRAM NUMBER   ++           DATE RECEIVED  ++++++   REFERRED SPECIMEN    -
8   BILLING NUMBER   ++++++++++   DATE OF ONSET  ++++++   ACUTE _ CONVALESCENT -
9
10  PT NAME _____________________ DATE OF BIRTH  ++++++   MALE _ FEMALE _ RACE +
11  STREET  /////_________________ CITY____________________ COUNTY __ STATE __
12  ZIP CODE +++++++++ SUBMITTER  //////////
13
14                SPECIMEN SOURCE                                TRAVEL
15
16      CSF         _   Autopsy              _          Foreign +++   USA     ++
17      Stool       _   Biopsy               _          Month   ++    Month   ++
18      Throat      _   Lesion               _          Year    ++    Year    ++
19      Urine       _   Vesicular Fluid      _
20      Blood       _   Mosquito             _
21      Gastric     _   Exudate              _
22      Serum       _   Tissue               _
23      Other _____________________          _
```

FIGURE C-19
Pretest Virology Screen

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1
 2                                   VIROLOGY (VI2)
 3
 4                                   POSTTEST
 5
 6  ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE OF REPORT ++++++
 7  SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
 8
 9            DIRECT EXAMINATION                    CULTURE
10          No Virus Detected  _              No Virus Isolated  _
11          Virus Detected     _              Presumptive Identification _
12          ____________________              ____________________
13                                            Virus Identified   _
14                                            ____________________
```

FIGURE C-20
Post-test Virology Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
1
2                                VIROLOGY RABIES (RA1)
3
4                                    PRETEST
5
6   ACCESSION NUMBER ++++++++++   DATE COLLECTED ++++++   CLINIC SPECIMEN      _
7   PROGRAM NUMBER   ++           DATE RECEIVED  ++++++   REFERRED SPECIMEN    _
8   BILLING NUMBER   ++++++++++   DATE OF ONSET  ++++++   ACUTE _ CONVALESCENT _
9
10  PT NAME _____________________ DATE OF BIRTH  ++++++   MALE _ FEMALE _ RACE +
11  STREET //////_______________  CITY____________________ COUNTY __ STATE __
12  ZIP CODE +++++++++ SUBMITTER ////////////
13
14              HUMAN EXPOSURE                          ANIMAL TYPE
15
16                Yes _   No _                  Dog     _      Raccoon _
17                                              Cat     _      Mouse   _
18                                              Cow     _      Rat     _
19                                              Horse   _      Hamster _
20                                              Bat     _      Skunk   _
21                                              Fox     _      Coyote  _
22                                              Other   _      Bobcat  _
23                                              ____________________
```

FIGURE C-21
Pretest Rabies Screen

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
1
2                                VIROLOGY RABIES (RA2)
3
4                                    POSTTEST
5
6  ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE OF REPORT ++++++
7  SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
8
9     HUMAN EXPOSURE       FA TECHNIQUE       NO ANIMAL INOCULATION WILL BE DONE _
10
11      Yes _    No __      Negative  _       ANIMAL INOCULATION REPORT TO FOLLOW _
12                          Positive  _
13                                                ANIMAL INOCULATION
14
15                                                  Negative _
16                                                  Positive _
```

FIGURE C-22
Post-test Rabies Screen

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
1                          IMMUNOLOGY SYPHILIS (TP1)
2
3                                  PRETEST
4
5  ACCESSION NUMBER ++++++++++   DATE COLLECTED ++++++   CLINIC SPECIMEN      _
6  PROGRAM NUMBER   ++           DATE RECEIVED  ++++++   REFERRED SPECIMEN    _
7  BILLING NUMBER   ++++++++++   DATE OF ONSET  ++++++   ACUTE _ CONVALESCENT _
8
9  PT NAME _____________________ DATE OF BIRTH  ++++++   MALE _ FEMALE _ RACE +
10 STREET /////_________________ CITY____________________ COUNTY __ STATE __
11 ZIP CODE +++++++++ SUBMITTER //////////
12                                                  REASON FOR TEST
13 TEST REQUESTED  SPECIMEN TYPE
14                                          Contact          _   Employment      _
15 VDRL         _  Serum        _          Premarital       _   Jail            _
16 RPR          _  CSF          _          Prenatal         _   Food Handler    _
17 FTA ABS      _  Other        _          Volunteer        _   Licensure       _
18 MHA TP       _  ----------              Survey           _   Migrant         _
19 DFATP        _                          Inpatient        _   Manpower Trng   _
20 FADF         _                          Outpatient       _   Self Motivated  _
21 Other        _                          Emergency Room   _   Phy Suspicion   _
22 ----------                              Blood Donor      _   RX Control      _
23                                         Military         _   Unspecified     _
24                                         Suspected False-Positive Reaction    _
```

FIGURE C-23
Pretest Syphilis Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
1                              IMMUNOLOGY SYPHILIS (TP2)
2
3                                    POSTTEST
4
5   ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE OF REPORT ++++++
6   SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
7
8                                  NON-TP TEST
9      Qualitative: VDRL   Nonreactive _  Weakly Reactive _  Reactive _
10                  RPR    Nonreactive _  Weakly Reactive _  Reactive _
11                  Other  Nonreactive _  Weakly Reactive _  Reactive _ ----------
12
13     Quantitative: VDRL ++++ RPR ++++ Other ______________ ++++
14
15                  TP TEST                              DFATP TEST
16
17  FTA ABS  Negative _ Borderline _ Reactive _   No spiral organisms found          _
18  MHA TP   Negative _ Borderline _ Reactive _   Non-fluorescent spiral organisms  _
19  Other    Negative _ Borderline _ Reactive _   Fluorescent spiral organisms      _
20  --------------------
21
22              DARKFIELD TEST              TOTAL PROTEIN: +++MG7 _
23               TP Not Seen _
24               TP Seen     _
```

FIGURE C-24
Post-test Syphilis Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1
 2                              IMMUNOLOGY BACTERIAL FEBRILE (BF1)
 3
 4                                        PRETEST
 5
 6  ACCESSION NUMBER ++++++++++   DATE COLLECTED ++++++   CLINIC SPECIMEN      _
 7  PROGRAM NUMBER   ++           DATE RECEIVED  ++++++   REFERRED SPECIMEN    _
 8  BILLING NUMBER   ++++++++++   DATE OF ONSET  ++++++   ACUTE _ CONVALESCENT _
 9
10  PT NAME ____________________  DATE OF BIRTH  ++++++   MALE _ FEMALE _ RACE +
11  STREET  /////_______________  CITY____________________ COUNTY __ STATE __
12  ZIP CODE +++++++++ SUBMITTER  //////////
13
14                                      TEST REQUESTED
15
16                              Legionnaires                _
17                              ASO                         _
18                              CRP                         _
19                              Leptospirosis               _
20                              Brucellosis                 _
21                              Tularemia                   _
22                              Other_____________________  _
```

FIGURE C-25
Pretest Bacterial Febrile Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1                          IMMUNOLOGY BACTERIAL FEBRILE (BF2)
 2                                    POSTTEST
 3  ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE OF REPORT ++++++
 4  SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
 5       ACUTE                NEGATIVE  POSITIVE  TITER    IDENTIFICATION
 6     Brucellosis  Slide
 7                  Tube          _         _     ++++
 8     Tularemia    Slide         _         _     ++++
 9                  Tube          _         _     ++++
10     CRP                        _         _     ++++
11     ASO                        _         _     ++++
12     Legionnaires               _               ++++
13     Leptospirosis              _               ++++  ----------
14     Other                      _               ++++  ----------
15      CONVALESCENT              _         _
16     Brucellosis  Slide
17                  Tube          _         _     ++++
18     Tularemia    Slide         _         _     ++++
19                  Tube          _         _     ++++
20     CRP                        _         _     ++++
21     ASO                        _         _     ++++
22     Legionnaires               _         _     ++++
23     Leptospirosis              _               ++++  ----------
24     Other                      _               ++++  ----------
```

FIGURE C-26
Post-test Bacterial Febrile Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
1
2                                IMMUNOLOGY FUNGAL (FU1)
3
4                                     PRETEST
5
6   ACCESSION NUMBER ++++++++++   DATE COLLECTED ++++++   CLINIC SPECIMEN      _
7   PROGRAM NUMBER   ++           DATE RECEIVED  ++++++   REFERRED SPECIMEN    _
8   BILLING NUMBER   ++++++++++   DATE OF ONSET  ++++++   ACUTE _ CONVALESCENT _
9
10  PT NAME _____________________ DATE OF BIRTH  ++++++   MALE _ FEMALE _ RACE +
11  STREET  /////_______________  CITY____________________ COUNTY __ STATE __
12  ZIP CODE +++++++++ SUBMITTER  //////////
13
14                    SPECIMEN TYPE                  TEST REQUESTED
15
16                Serum                  _       Histoplasmosis         _
17                CSF                    _       Blastomycosis          _
18                Other_____________     _       Coccidioidomycosis     _
19                                                Cryptococcosis         _
20                                                Other_____________     _
```

FIGURE C-27
Pretest Fungal Screen

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
1                                IMMUNOLOGY FUNGAL (FU2)
2
3                                     POSTTEST
4
5  ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE OF REPORT ++++++
6  SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
7
8         COMPLEMENT FIXATION TEST    ANTIGEN      NEGATIVE  POSITIVE/TITER
9            Histoplasmosis           Mycelial       +++        +++
10           Histoplasmosis           Yeast          +++        +++
11           Blastomycosis            Yeast          +++        +++
12           Coccidioidomycosis       Coccidioidin   +++        +++
13
14        IMMUNODIFFUSION (AGAR GEL) TEST          NEGATIVE  POSITIVE
15           Histoplasmosis                         +++        +++
16           Blastomycosis                          +++        +++
17           Coccidioidomycosis                     +++        +++
18           Other ____________________             +++        +++
19
20        MISCELLANEOUS TEST                       NEGATIVE  POSITIVE/TITER
21           Cryptococcosis                         +++        +++
22           Other ____________________             +++        +++
```

FIGURE C-28
Post-test Fungal Screen

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1
 2                                IMMUNOLOGY PARASITIC (PL1)
 3
 4                                      PRETEST
 5
 6  ACCESSION NUMBER ++++++++++   DATE COLLECTED ++++++   CLINIC SPECIMEN      _
 7  PROGRAM NUMBER   ++           DATE RECEIVED  ++++++   REFERRED SPECIMEN    _
 8  BILLING NUMBER   ++++++++++   DATE OF ONSET  ++++++   ACUTE _ CONVALESCENT _
 9
10  PT NAME ____________________  DATE OF BIRTH  ++++++   MALE _ FEMALE _ RACE +
11  STREET  /////_______________  CITY____________________ COUNTY __ STATE __
12  ZIP CODE +++++++++ SUBMITTER  //////////
13
14                                   TEST REQUESTED
15
16                                  Toxoplasmosis  _
17                                  Amebiasis      _
18                                  Trichinosis    _
19                                  Other__________
```

FIGURE C-29
Pretest Immunology Parasitic Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
1
2                                IMMUNOLOGY PARASITIC (PL2)
3
4                                      POSTTEST
5
6   ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE OF REPORT ++++++
7   SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
8
9                TEST AND                NON-      WEEKLY
10                METHOD               REACTIVE   REACTIVE   REACTIVE/TITER   BANDS
11
12          Toxoplasmosis IFA           +++        +++          ++++
13          Toxoplasmosis IHA           +++        +++          ++++
14          Toxoplasmosis EIA           +++        +++          ++++
15          Toxoplasmosis IgM           +++        +++          ++++
16          Amebiasis     IHA           +++        +++          ++++
17          Amebiasis     LA            +++        +++          ++++
18          Amebiasis     ID            +++        +++          ++++          ++++
19          Trichinosis   BFT           +++        +++          ++++
20          Trichinosis   LA            +++        +++          ++++
21          Other _______________       +++        +++          ++++
```

Figure C-30
Post-test Immunology Parasitic Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
1                                   IMMUNOLOGY
2                            VIRAL AND RICKETTSIAL (VR1)
3
4                                    PRETEST
5
6   ACCESSION NUMBER ++++++++++   DATE COLLECTED ++++++   CLINIC SPECIMEN      -
7   PROGRAM NUMBER   ++           DATE RECEIVED  ++++++   REFERRED SPECIMEN    -
8   BILLING NUMBER   ++++++++++   DATE OF ONSET  ++++++   ACUTE _ CONVALESCENT -
9
10  PT NAME _____________________ DATE OF BIRTH  ++++++   MALE _ FEMALE _ RACE +
11  STREET //////_______________  CITY____________________ COUNTY __ STATE __
12
13                                  TEST REQUESTED
14
15                  Herpes simplex  _        Rickettsial     _
16                  CMV             _        Poliomyelitis   _
17                  Mycoplasma      _        Rubella         _
18                  EBV             _        Rubeola         _
19                  Arbovirus       _        Mumps           _
20                  Mononucleosis   _        Influenza       _
21                  Hepatitis A     _        Varicella       _
22                  Hepatitis B     _        Other           _
23                                           ____________________
```

FIGURE C-31
Pretest Viral and Rickettsial Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
1                          IMMUNOLOGY VIRAL AND RICKETTSIAL (VR2)
2                                      POSTTEST
3              ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE OF REPORT ++++++
4                          SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
5
6        TEST PERFORMED: CF _ HI _ IFA _ IHA _ EIA _ SNT _ LA _ OTHER_____________
7                        ACUTE TITER ++++  CONVALESCENT TITER ++++
8        RUBELLA (SCREEN)              MONONUCLEOSIS          NEGATIVE POSITIVE TITER
9          Negative _                  Slide Test               +++      +++
10         Equivocal _                 Ox Cell Hemolysin Test   +++      +++     ++++
11         Positive _                  Heterophile Antibody Test +++     +++     ++++
12       HEPATITIS A:  Negative _ AB Positive _ (Time Undetermined)
13                     AB Positive IgM Positive _ AB Positive IgM Negative _
14       HEPATITIS B:  ANTIGEN NEGATIVE POSITIVE ANTIBODY NEGATIVE POSITIVE VALUE
15                     Surface   +++      +++    Surface   +++      +++     ++++
16                     Core      +++      +++    Core      +++      +++     ++++
17       HEPATITIS Be: ANTIGEN   +++      +++    ANTIBODY  +++      +++     ++++
18                                   VIRUS IDENTIFIED
19   Influenza A     _ CMV _ Rubella _ Herpes simplex _ Varicella              _ CE _
20   Influenza B     _ RSV _ Rubeola _ Murine typhus  _ Mycoplasma             _
21   Adenovirus      _ EBV _ Mumps   _ Epidemic Typhus _ Coxsackie             _
22   Para Type1(HA2) _ EEE _ Dengue  _ Polio Type 1   _ Echo Type +++          _
23   Para Type2(CA)  _ WEE _ Q Fever _ Polio Type 2   _ Chlamydia(LGV PSITT)  _
24   Para Type3(HAI) _ SLE _ RMSF    _ Polio Type 3   _ Other_________________ _
```

FIGURE C-32
Post-test Viral and Rickettsial Screen

```
    12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1
 2                                  HEMATOLOGY (HE1)
 3
 4                                    PRETEST
 5
 6  ACCESSION NUMBER ++++++++++   DATE COLLECTED ++++++   CLINIC SPECIMEN      _
 7  PROGRAM NUMBER   ++           DATE RECEIVED  ++++++   REFERRED SPECIMEN    _
 8  BILLING NUMBER   ++++++++++   DATE OF ONSET  ++++++   ACUTE _ CONVALESCENT _
 9
10  PT NAME ____________________  DATE OF BIRTH  ++++++   MALE _ FEMALE _ RACE +
11  STREET //////______________   CITY____________________ COUNTY __ STATE __
12  ZIP CODE +++++++++  SUBMITTER ///////////
13
14    SPECIMEN TYPE                          TEST REQUESTED
15     Whole Blood _        CBC _      RH Factor              _     Sickle Cell Sol _
16           Serum _        HGB _      RH Antibody            _     HGB Electro     _
17         Plasma _         HCT _      Platelets              _     Erythrocyte P   _
18           Other _        WBC _      Differential           _     Other
19                          RBC _      Blood Grouping(ABO)    _     ---------------
20                          MCV _      Reticulocyte Count     _
21                          MCH _      Prothrombin Time       _
22                         MCHC _      Quantitation           _
```

FIGURE C-33
Pretest Hematology Screen

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1
 2                                  HEMATOLOGY (HE2)
 3
 4                                    POSTTEST
 5
 6  ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE REPORTED ++++++
 7  SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
 8
 9  HEMATOLOGY: RBC++.+ WBC++.+ HGB++.+ HCT(%)++ MCV++ MCH++ MCHC++
10  DIFFERENTIAL: Lymphs++.+ Monocytes++.+ EOS++.+ BASO++.+ SEGS++.+ Bands++.+
11                Metamyelocytes++.+ Myelocytes++.+ Progranulocytes++.+
12                Granuloblasts++.+ Other++.+ __________
13  WBC ABNORMALITIES: Hyperseg _ Hyposeg _ Smudge _ Other _______________
14  WBC INCLUSIONS: Auer Rods _ Bacteria _ Doehle _ Toxic Gran _ Vacuoles _
15                  Other _____________________
16    RBC MORPHOLOGY   NO YES1 YES2 YES3 YES4  RBC ABNORMALITIES       NO YES
17  Hypochromia        _   _    _    _    _     Elliptocytes           _   _
18  Polychromatophilia _   _    _    _    _     Target Cells           _   _
19  Anisocytosis       _   _    _    _    _     Spherocytes            _   _
20  Poikilocytosis     _   _    _    _    _     Sickle Cell            _   _
21  Microcytosis       _   _    _    _    _     Other _______________  _   _
22  Macrocytosis       _   _    _    _    _
```

FIGURE C-34
Post-test Hematology Screen 1

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1
 2                                  HEMATOLOGY (HE3)
 3
 4                                    POSTTEST
 5
 6  ACCESSION NUMBER ++++++++++ ANALYST ++++ DATE REPORTED ++++++
 7  SPECIMEN UNSAT ++ SPECIMEN REFERRED ++
 8
 9  RBC INCLUSIONS: Baso Stipplings _ Cabot Rings _ Howell Jolly Bodies _
10                  Other ____________________
11  NUCLEATED RBC TIMES 100WBC ++.+
12  PLATELETS: Absent _ Decreased _ Normal _ Increased _ Clumped _ Macrothrombocyte_
13  RETICULOCYTES ++.+ PROTHROMBIN TIME ++.+
14  IMMUNOHEMATOLOGY:  Blood Grouping (ABO) ___
15   RH FACTOR: RH0(D) POS _ RH0(D) NEG(DU)NEG _ RH0(D) Variant(DU)POS _
16   RH ANTIBODY: NEG _ Positive Titer ++++ ID __________
17  HEMOGLOBINOPATHY (SICKLE CELL SOLUBILITY TEST):
18   Dithionate: NEG _ POS _       Dithionate Urea: NEG _ POS _
19  HEMOGLOBIN ELECTROPHORESIS PATTERN: Normal _ Abnormal _
20   Abnormal Pattern: AF _ AS _ AC _ SC _ SS _ CC _ S BETA THAL _ Other _____________
21  QUANTITATION AS % OF TOTAL HGB ++.+
22
23  ERYTHROCYTE PROTOPORPHYRIN +++ +++
```

FIGURE C-35
Post-test Hematology Screen 2

```
   12345678901234567890123456789012345678901234567890123456789012345678901234567890
 1
 2                          STATE PUBLIC HEALTH LABORATORY
 3                            T. P. Immunology, Ph.D., Director
 4                         896 16th Avenue, Anywhere, State  12345
 5                                  Phone (123) 456-7890
 6
 7                       To: John Jones, M.D.     PT: Infectious Smith
 8                           3561 Halfway St          Date of Birth ++++++
 9                           Somewhere, State         Male _ Female _
10                                      12345
11
12                 TEST          TEST*   ACCESSION     DATE      DATE
13                 NAME          RESULT   NUMBER       RECD      PROC
14            ---------------    //////  ++++++++++   ++++++    ++++++
15            ---------------    //////  ++++++++++   ++++++    ++++++
16            ---------------    //////  ++++++++++   ++++++    ++++++
17            ---------------    //////  ++++++++++   ++++++    ++++++
18
19
20            *OTHER TEST INFORMATION ////////////////////////////////
21                                    ////////////////////////////////
22                                    ////////////////////////////////
23                                    ////////////////////////////////
```

FIGURE C-36
Sample of Possible Report Format